

FINDING OF NO SIGNIFICANT IMPACT

Central Business District (CBD) Tolling Program

New York, New York

Federal Lead Agency

Federal Highway Administration

Project Sponsors

New York State Department of Transportation

Triborough Bridge and Tunnel Authority

New York City Department of Transportation



U.S. Department
of Transportation

**Federal Highway
Administration**



**Department of
Transportation**



June 2023

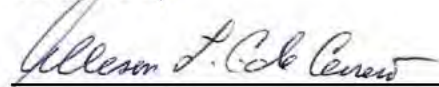
Why did the Federal Highway Administration (FHWA) Publish a Finding of No Significant Impact (FONSI)?

The nature of this Proposed Action, if approved, is the first proposal in the nation to manage congestion through cordon pricing. Under the Council on Environmental Quality regulations (40 CFR 1501.6) the agency shall make the FONSI available for public review for 30 days before the agency makes its final determination whether to prepare an environmental impact statement and before the action may begin.

FONSI

FHWA has determined that the Proposed Action (the CBD Tolling Alternative), described in the Final EA and identified as the Selected Alternative, will have no significant impact on the human or natural environment. This FONSI is based on the Final EA including appropriate mitigation measures. FHWA has independently evaluated the Final EA and determined it to adequately and accurately document the purpose and need, environmental issues, and impact of the Proposed Action and appropriate mitigation measures. The Final EA provides sufficient evidence and analysis for determining that an environmental impact statement is not required. FHWA takes full responsibility for the accuracy, scope, and content of the Final EA.

Submitted by:



Allison L. C. de Cerreño, Ph.D.
Chief Operating Officer
Triborough Bridge and Tunnel Authority

06/22/2023

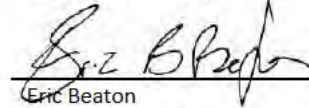
Date



Nicolas A. Choubah, P.E.
Chief Engineer
New York State Department of Transportation

06/22/2023

Date

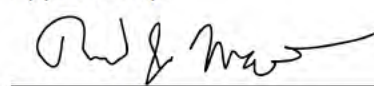


Eric Beaton
Deputy Commissioner, Transportation Planning & Management
New York City Department of Transportation

06/22/2023

Date

Approved by:



Richard J. Marquis
Division Administrator, New York Division
Federal Highway Administration

06/23/2023

Date

June 2023

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The Federal Highway Administration may publish a notice in the Federal Register, pursuant to 23 United States Code (USC) § 139(l), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 150 days after the date of publication of the notice, or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.

Table of Contents

1. What is the Proposed Action?	1
2. What Are the Commitments to Mitigate Adverse Effects of the Proposed Action?	2
3. What Has Been Done Since the Final Environmental Assessment (EA)?	25
4. Has the Final EA Changed as a Result of the Public Availability Period?	25
5. What Are the Next Steps?	25

Tables

Table 1.	Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios	3
Table 2.	Regional and Place-Based Mitigation Measures	15
Table 3.	Summary of the CBD Tolling Alternative Implementation Approach for Mitigation and Enhancement Measures.....	16

Appendices

Appendix A.	Central Business District (CBD) Tolling Program Final Environmental Assessment
Appendix B.	Public Noticing of the Availability of the Final Environmental Assessment and Draft Finding of No Significant Impact

1. What is the Proposed Action?

The Proposed Action is the CBD Tolling Alternative, which is the Selected Alternative. The CBD Tolling Alternative (the Project) will implement a vehicular tolling program to reduce traffic congestion in the Manhattan CBD, consistent with the Traffic Mobility Act.¹ The Project purpose is to reduce traffic congestion in the Manhattan CBD in a manner that will generate revenue for future transportation improvements, pursuant to acceptance into FHWA's Value Pricing Pilot Program (VPPP).

The Manhattan CBD consists of the geographic area of Manhattan south and inclusive of 60th Street, but not including Franklin D. Roosevelt Drive (FDR Drive), West Side Highway/Route 9A, the Battery Park Underpass, and any surface roadway portion of the Hugh L. Carey Tunnel connecting to West Street (the West Side Highway/Route 9A). With the CBD Tolling Alternative, Triborough Bridge and Tunnel Authority (TBTA), an affiliate of the Metropolitan Transportation Authority (MTA), will toll vehicles entering or remaining in the Manhattan CBD via a cashless tolling system. The toll will apply to all registered vehicles (i.e., those with license plates), with the exception of qualifying vehicles transporting persons with disabilities and qualifying authorized emergency vehicles.^{2, 3} Passenger vehicles will be tolled no more than once a day.⁴ Vehicles that "remain" in the Manhattan CBD are vehicles that are detected when leaving but were not detected entering in the same day. Given that they were detected leaving, they must have driven through the Manhattan CBD to get to the detection point, and therefore "remained" in it during a portion of the day. These vehicles will be charged that day for remaining in the Manhattan CBD.

Residents whose primary residence is inside the Manhattan CBD and whose New York State adjusted gross income is less than \$60,000 will be eligible for a New York State tax credit equal to the amount of Manhattan CBD tolls paid during the taxable year.

The toll amount will be variable, with higher tolls charged during peak periods when congestion is greater. Because the effects are closely related to the toll structure, the CBD Tolling Alternative evaluated a range of toll structures in defined tolling scenarios. In most of these tolling scenarios, the toll rates for different types of vehicles, like delivery trucks, are different than the toll rates for noncommercial passenger vehicles. The toll rates and structure will be established by the TBTA, as explained in Section 5.

¹ The Traffic Mobility Act amended portions of certain New York State laws, including the Vehicle and Traffic Law, the Public Authorities Law, and the Tax Law. **Appendix 2B of the Final EA, "Project Alternatives: MTA Reform and Traffic Mobility Act,"** provides the amended text of those laws.

² Qualifying authorized emergency vehicle is defined in Consolidated Laws of the State of New York, Vehicle and Traffic Law, Title 1, Article 1 Section 101. As currently defined, qualifying vehicles transporting persons with disabilities include vehicles with government-issued disability license plates and fleet vehicles owned or operated by organizations and used exclusively to provide transportation to people with disabilities.

³ The toll will not apply to vehicles that are not subject to registration requirements, such as bicycles, electric scooters, bicycles with electric assist ("e-bikes").

⁴ Passenger vehicle is defined by Consolidated Laws of the State of New York, Vehicle and Traffic Law, Title 4, Article 14 Section 401(6).

2. What Are the Commitments to Mitigate Adverse Effects of the Proposed Action?

Table 1 summarizes the potential effects of the Project as identified in the Final EA and the monitoring and mitigation commitments made by the Project Sponsors that FHWA has determined will result in no significant impacts. Tables 2 and 3 further set forth the Project Sponsor(s), and relevant local agencies that will implement the identified mitigation and enhancement measures and the authority of the Project Sponsors to implement the identified mitigation.

Table 1. Summary of Benefits and Effects for the CBD Tolling Alternative with Comparison of Tolling Scenarios

EA CHAPTER / ENVIRONMENTAL CATEGORY	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS	
					A	B	C	D	E	F	G			
4A – Transportation: Regional Transportation Effects and Modeling	Vehicle Volumes	Decreases in daily vehicle trips to Manhattan CBD overall. Some diversions to different crossings to Manhattan CBD or around the Manhattan CBD altogether, depending on tolling scenario. As traffic, including truck trips, increase on some circumferential highways, simultaneously there is a reduction in traffic on other highway segments to the CBD. Diversions will increase or decrease traffic volumes at local intersections near the Manhattan CBD crossings. Overall decrease in vehicle-miles traveled (VMT) in the Manhattan CBD and region overall in all tolling scenarios and some shift from vehicle to transit mode.	Crossing locations to Manhattan CBD	% Increase or decrease in daily vehicles entering the Manhattan CBD relative to No Action Alternative	-15%	-16%	-17%	-19%	-20%	-18%	-17%	No	No mitigation needed. Beneficial effects	
	Auto Journeys to Manhattan CBD		Manhattan CBD	% Increase or decrease in worker auto journeys to Manhattan CBD relative to No Action Alternative	-5%	-5%	-7%	-9%	-11%	-10%	-6%	No	No mitigation needed. Beneficial effects	
				Absolute increase or decrease in daily worker auto trips to Manhattan CBD relative to No Action Alternative	-12,571	-12,883	-17,408	-24,017	-27,471	-24,433	-14,578			
	Truck Trips Through Manhattan CBD		Manhattan CBD	Increase or decrease in daily truck trips through Manhattan CBD (without origin or destination in the CBD) relative to No Action Alternative	-4,645 (-55%)	-4,967 (-59%)	-5,253 (-63%)	-5,687 (-68%)	-6,604 (-79%)	-6,784 (-81%)	-1,734 (-21%)	No	No mitigation needed. Beneficial effects	
	Transit Journeys		Manhattan CBD	% Increase or decrease in daily Manhattan CBD-related transit journeys relative to No Action Alternative	+1 to +3%							No	No mitigation needed. No adverse effects	
	Traffic Results		Manhattan CBD	% Increase or decrease in daily VMT relative to No Action Alternative	-9% to -7%							No	No mitigation needed. Beneficial effects in Manhattan CBD, New York City (non-CBD), north of New York City, and Connecticut; although there will be VMT increases in Long Island and New Jersey, the effects will not be adverse.	
					NYC (non-Manhattan CBD)	-1 to 0%								
					New York north of NYC	-1% to 0%								
					Long Island	Less than (+) 0.2% change								
					New Jersey	Less than (+) 0.2% change								
Connecticut		Less than (+) 0.2% change												

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4B – Transportation: Highways and Local Intersections	Traffic – Highway Segments	The introduction of the CBD Tolling Program may produce increased congestion on highway segments approaching on circumferential roadways used to avoid Manhattan CBD tolls, resulting in increased delays and queues in midday and PM peak hours on certain segments in some tolling scenarios: <ul style="list-style-type: none">Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel (midday)Approaches to westbound George Washington Bridge on I-95 (midday)Southbound and northbound FDR Drive between East 10th Street and Brooklyn Bridge (PM)Other locations will see an associated decrease in congestion particularly on routes approaching the Manhattan CBD	10 highway segments (AM)	Highway segments with increased delays and queues in peak hours that will result in adverse effects	0 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D)							Yes	Mitigation needed. The Project Sponsors will implement a monitoring plan prior to implementation with post-implementation data collected approximately three months after the start of tolling operations and including thresholds for effects; if the thresholds are reached or crossed, the Project Sponsors will implement Transportation Demand Management (TDM) measures, such as ramp metering, motorist information, signage at all identified highway locations with adverse effects upon implementation of the Project. NYSDOT owns and maintains the relevant segments of the Long Island Expressway and I-95. The relevant segment of the FDR Drive is owned by NYSDOT south of Montgomery Street and NYCDOT north of Montgomery Street. Implementation of TDM measures will be coordinated between the highway owners and the owners of any assets relevant to implementing the TDM. Post-implementation of TDM measures, the Project Sponsors will monitor effects and, if needed, TBTA will modify the toll rates, crossing credits, exemptions, and/or discounts within the parameters of the adopted toll schedule to reduce adverse effects.
			10 highway segments (midday)		2 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F								
			10 highway segments (PM)		1 out of 10 highway corridors in the analyzed tolling scenario (Tolling Scenario D), as well as Tolling Scenarios E and F								
	Intersections	Shifts in traffic patterns, with increases in traffic at some locations and decreases at other locations, will change conditions at some local intersections within and near the Manhattan CBD. Of the 102 intersections analyzed, most intersections will see reductions in delay.	363 locations (All day)	Number of instances of intersections with an increase in volumes of 50 or more vehicles in the peak hours.	9	10	24	50	48	50	10	Yes	Mitigation needed. NYCDOT will monitor those intersections where potential adverse effects were identified and implement appropriate signal timing adjustments to mitigate the effect, per NYCDOT’s normal practice. Enhancement Refer to the overall enhancement on monitoring at the end of this table.
			102 locations (AM)		2	2	3	3	3	2			
			102 locations (midday)		1	2	4	16	16	17	0		
			102 locations (PM)		1	1	1	10	9	9	1		
			57 locations (overnight)		5	5	16	21	20	21	5		
			Potential adverse effects on four local intersections in Manhattan: Trinity Place and Edgar Street (midday); East 36th Street and Second Avenue (midday); East 37th Street and Third Avenue (midday); East 125th Street and Second Avenue (AM, PM)	4 locations	Locations with potential adverse effects that will be addressed with signal timing adjustments	0	0	0	4	4	4		

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4C – Transportation: Transit	Transit Systems	The Project will generate a dedicated revenue source for investment in the transit system. Transit ridership will increase by 1 to 2 percent systemwide for travel to and from the Manhattan CBD, because some people will shift to transit rather than driving. Increases in transit ridership will not result in adverse effects on line-haul capacity on any transit routes.	New York City Transit	% Increase or decrease in total daily transit ridership systemwide	1.5% to 2.1%							No	No mitigation needed. No adverse effects
			PATH		0.8% to 2.0%								
			Long Island Rail Road		0.6% to 2.0%								
			Metro-North Railroad		0.6% to 1.9%								
			NJ TRANSIT commuter rail		0.3% to 2.3%								
			MTA/NYCT Buses		1.3% to 1.6%								
			NJ TRANSIT Bus		0.5% to 1.1%								
			Other buses (suburban and private operators)		0.0% to 0.9%								
			Ferries (Staten Island Ferry, NYC Ferry, NY Waterway, Seastreak)		2.5% to 3.5%								
			Roosevelt Island Tram		1.7% to 4.1%								
	Bus System Effects	Decreases in traffic volumes within the Manhattan CBD and near the 60th Street boundary of the Manhattan CBD will reduce the roadway congestion that adversely affects bus operations, facilitating more reliable, faster bus trips.	Manhattan local buses	% Increase or decrease at maximum passenger load point	Increases of 0.5% to 1.2%							No	No mitigation needed. No adverse effects
			Bronx express buses		-1.6% to 2.2%								
			Queens local and express buses (via Ed Koch Queensboro Bridge)		2.0% to 2.8%								
			Queens express buses (via Queens-Midtown Tunnel)		-1.3% to 4.1%								
			Brooklyn local and express buses		1.3% to 2.6%								
			Staten Island express routes (via Brooklyn)		3.7% to 4.5%								
			Staten Island express routes (via NJ)		1.0% to 2.8%								
			NJ/West of Hudson buses (via Holland Tunnel)		-1.4% to 1.4%								
			NJ/West of Hudson buses (via Lincoln Tunnel)		0.4% to 1.5%								

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4C – Transportation: Transit (Cont'd)	Transit Elements	Increased ridership will affect passenger flows with the potential for adverse effects at certain vertical circulation elements (i.e., stairs and escalators) in five transit stations: <ul style="list-style-type: none">Hoboken Terminal, Hoboken, NJ PATH stationTimes Sq-42 St/42 St-Port Authority Bus Terminal subway station in the Manhattan CBD (N, Q, R, W, and S; Nos. 1, 2, 3, and 7; and A, C, E lines)Flushing-Main St subway station, Queens (No. 7 line)14th Street-Union Square subway station in the Manhattan CBD (Nos. 4, 5, and 6; and L, N, Q, R, W lines)Court Square subway station, Queens (No. 7 and E, G, M lines)	Hoboken Terminal–PATH station (NJ) Stair 01/02	Net passenger increases or at stair in the peak hour	45	72	122	164	240	205	139	Yes	Mitigation needed for Tolling Scenarios E and F. TBTA will coordinate with NJ TRANSIT and PANYNJ to monitor pedestrian volumes on Stair 01/02 one month prior to commencing tolling operations to establish a baseline, and two months after Project operations begin. If a comparison of Stair 01/02 passenger volumes before and after implementation shows an incremental change that is greater than or equal to 205, then TBTA will coordinate with NJ TRANSIT and PANYNJ to implement improved signage and wayfinding to divert some people from Stair 01/02, and supplemental personnel if needed.
			42 St-Times Square–subway station (Manhattan) Stair ML6/ML8 connecting mezzanine to uptown 1/2/3 lines subway platform	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	63%	59%	68%	82%	100%	82%	56%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to remove the center handrail and standardize the riser, so that the stair meets code without the hand rail. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.
			Flushing-Main St subway station (Queens)–Escalator E456 connecting street to mezzanine level	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	116%	91%	108%	116%	100%	133%	72%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the speed from 100 feet per minute (fpm) to 120 fpm.
			Union Sq subway station (Manhattan)–Escalator E219 connecting the L subway line platform to the Nos. 4/5/6 line mezzanine	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	63%	82%	87%	102%	100%	95%	61%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the escalator speed from 100 fpm to 120 fpm.

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4C – Transportation: Transit (Cont'd)	Transit Elements (Cont'd)	Increased ridership will affect passenger flows with the potential for adverse effects at certain vertical circulation elements (i.e., stairs and escalators) in five transit stations (cont'd)	Court Sq subway station (Queens)–Stair P2/P4 to Manhattan-bound No. 7 line	Relative increase or decrease in passenger volumes at station OVERALL as compared to Tolling Scenario E (not only at the affected stair or location) in the peak hour, peak period	98%	90%	102%	104%	100%	117%	97%	Yes	Mitigation needed. TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to construct a new stair from the northern end of the No. 7 platform to the street. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.
4D – Transportation: Parking	Parking Conditions	All tolling scenarios will result in a reduction in parking demand within the Manhattan CBD of a similar magnitude to the reduction in auto trips into the Manhattan CBD. With a shift from driving to transit, there will be increased parking demand at subway and commuter rail stations and park-and-ride facilities outside the Manhattan CBD.	Manhattan CBD	Narrative	Reduction in parking demand due to reduction in auto trips to CBD							No	No mitigation needed. Beneficial effects
		Transit facilities	Narrative	Small changes in parking demand at transit facilities, corresponding to increased commuter rail and subway ridership							No	No mitigation needed. No adverse effects	
4E – Transportation: Pedestrians and Bicycles	Pedestrian Circulation	Increased pedestrian activity on sidewalks outside transit hubs because of increased transit use. At all but one location in the Manhattan CBD (Herald Square/Penn Station), the increase in transit riders will not generate enough new pedestrians to adversely affect pedestrian circulation in the station area. Outside the Manhattan CBD, transit usage at individual stations will not increase enough to adversely affect pedestrian conditions on nearby sidewalks, crosswalks, or corners.	Herald Square/Penn Station NY	Sidewalks, corners, and crosswalks with pedestrian volumes above threshold in AM / PM peak periods	Adverse effects on pedestrian circulation at one sidewalk segment and two crosswalks							Yes	Mitigation needed. NYCDOT will implement a monitoring plan at this location. The plan will include a baseline, specific timing, and a threshold for additional action. If that threshold is reached, NYCDOT will increase pedestrian space on sidewalks and crosswalks via physical widening and/or removing or relocating obstructions.
	Bicycles	Small increases in bicycle trips near transit hubs and as a travel mode	Manhattan CBD	Narrative	Small increases in bicycle trips near transit hubs with highest increases in pedestrian trip share							No	No mitigation needed. No adverse effects
			Outside Manhattan CBD	Narrative	Some shifts from automobile to bicycles							No	No mitigation needed. No adverse effects
	Safety	No adverse effects	Overall	Narrative	No substantial increases in pedestrian volumes or increased safety concerns, including at existing identified high-crash locations. Overall, with fewer vehicular trips entering and exiting the Manhattan CBD, the CBD Tolling Alternative could result in reduced traffic volumes at these locations. This will help to reduce vehicle-vehicle and vehicle-pedestrian conflicts, leading to an overall benefit to safety.							No	No mitigation needed. No adverse effects
5A – Social Conditions: Population	Benefits	Benefits in and near the Manhattan CBD	28-county study area	Narrative	Benefits in and near the Manhattan CBD related to travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety, reduced air pollutant emissions, and predictable funding source for transit improvements. This will positively affect community connections and access to employment, education, healthcare, and recreation for residents.							No	No mitigation needed. Beneficial effects
	Community Cohesion	Changes to travel patterns, including increased use of transit, resulting from new toll	28-county study area	Narrative	Changes to travel patterns, including increased use of transit, as a result of the Project will not adversely affect community cohesion or make it more difficult for people to connect with others in their community, given the extensive transit network connecting to the Manhattan CBD and the small change in trips predicted.							No	No mitigation needed. No adverse effects (see "Environmental Justice" below for mitigation related to increased costs for low-income drivers).

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5A – Social Conditions: Population (Cont'd)	Indirect Displacement	No notable changes in socioeconomic conditions or cost of living so as to induce potential involuntary displacement of residents	Manhattan CBD	Narrative	The Project will not result in the potential for indirect (involuntary) residential displacement. It will not result in substantial changes to market conditions so as to lead to changes in housing prices, given that real estate values in the Manhattan CBD are already high and the many factors that affect each household's decisions about where to live. In addition, low-income residents of the CBD will not experience a notable increase in the cost of living as a result of the Project because of the lack of change in housing costs, the many housing units protected through New York's rent-control, rent-stabilization, and other similar programs, the tax credit available to CBD residents with incomes of up to \$60,000, and the conclusion that the cost of goods will not increase as a result of the Project (see "Economic Conditions" below).							No	No mitigation needed. No adverse effects
	Community Facilities and Services	Increased cost for community facilities and service providers in the Manhattan CBD, their employees who drive, and clientele who drive from outside the CBD	Manhattan CBD	Narrative	The Project will increase costs for community service providers that operate vehicles into and out of the Manhattan CBD and for people who travel by vehicle to community facilities and services in the Manhattan CBD, as well as residents of the CBD and employees of community facilities who use vehicles to travel to community facilities outside the CBD. Given the wide range of travel options other than driving, the cost for users to drive to community facilities and services does not constitute an adverse effect on community facilities and services.							No	No mitigation needed. No adverse effects
	Effects on Vulnerable Social Groups	Benefits to vulnerable social groups from new funding for MTA Capital Program	28-county study area	Narrative	<p>The Project will benefit certain vulnerable social groups, including elderly populations, persons with disabilities, transit-dependent populations, and non-driver populations by creating a funding source for the MTA 2020–2024 Capital Program (and subsequent capital programs and by reducing congestion in the Manhattan CBD).</p> <p>Elderly individuals will benefit from the travel-time and reliability improvements to bus service with the CBD Tolling Alternative, as bus passengers tend to be older than riders on other forms of transit, such as the subway and, as described above, bus passengers in the Manhattan CBD will benefit from travel-time savings due to the decrease in congestion.</p> <p>People over the age of 65 with a qualifying disability receive a reduced fare on MTA subways and buses, and elderly individuals with a qualifying disability can also receive MTA's paratransit service, including taxis and FHV's operating on behalf of MTA to transport paratransit users. Elderly people with disabilities and low-income individuals who drive to the Manhattan CBD will be entitled to the same mitigation and enhancements proposed for low-income and disabled populations, in general. Other elderly individuals who drive to the Manhattan CBD will pay the toll.</p>							No	No mitigation needed. No adverse effects
	Access to Employment	Increased cost for small number of people who drive to work	28-county study area	Narrative	Decrease in work trips by driving modes to and within the Manhattan CBD, with an offsetting increase in transit ridership. Those who drive despite the CBD toll will do so based on the need or convenience of driving and will benefit from the reduced congestion in the Manhattan CBD. Negligible effect (less than 0.1%) on travel to employment within the Manhattan CBD and reverse-commuting from the CBD due to the wide range of transit options available and the small number of commuters who drive today.							No	No mitigation needed. No adverse effects
5B – Social Conditions: Neighborhood Character	No notable change in neighborhood character		Manhattan CBD	Narrative	The changes in traffic patterns on local streets are unlikely to change the defining elements of the neighborhood character of the Manhattan CBD.							No	No mitigation needed. No adverse effects
			Area near 60th Street Manhattan CBD boundary	Narrative	Changes in parking demand near the 60th Street CBD boundary (including increases just north of 60th Street and decreases just to the south) will not create a climate of disinvestment that could lead to adverse effects on neighborhood character nor alter the defining elements of the neighborhood character of this area.							No	No mitigation needed. No adverse effects
5C – Social Conditions: Public Policy	No effect		28-county study area	Narrative	The Project will be consistent with regional transportation plans and other public policies in place for the regional study area and the Manhattan CBD.							No	No mitigation needed. No adverse effects

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6 – Economic Conditions	Benefits	Regional economic benefits	28-county study area	Narrative	Economic benefit through congestion relief in terms of travel-time savings and travel-time reliability improvements, which will increase productivity and utility, as well as safety improvements and reduced vehicle operating costs associated with reductions in congestion.							No	No mitigation needed. Beneficial effects
	Economic Effects of Toll Costs	Cost of new toll for workers and businesses in the CBD that rely on vehicles	Manhattan CBD	Narrative	No adverse effects to any particular industry or occupational category in the Manhattan CBD. Given the high level of transit access in the CBD and high percentage of transit share, the toll will affect only a small percentage of the overall workforce. This will not adversely affect operations of businesses in the Manhattan CBD or the viability of any business types, including the taxi/FHV industry.							No	No mitigation needed. No adverse effects Enhancements The Project Sponsors commit to establishing a Small Business Working Group (SBWG) that will meet 6 months prior and 6 months after Project implementation, and annually thereafter, to solicit ongoing input on whether and how businesses are being affected. As part of mitigation for other topics, TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure; this will also benefit some workers and businesses.
	Price of Goods	Cost of new toll will not result in changes in the cost of most consumer goods	Manhattan CBD	Narrative	Unlikely to result in meaningful change in cost for most consumer goods. Any cost increase associated with the new toll in the CBD Tolling Alternative that will be passed along to receiving businesses will be distributed among several customers per toll charge (since trucks make multiple deliveries) especially for businesses, including small businesses and micro-businesses, receiving smaller deliveries. This will minimize the cost to any individual business. Some commodity sectors (construction materials, electronics, beverages) are more prone to increases due to less competition within delivery market.							No	No mitigation needed. No adverse effects
	Taxi and FHV Industry	Depending on the tolling scenario, the toll could reduce taxi and FHV revenues due to a reduction in taxi/FHV VMT with passengers within the CBD. While this could adversely affect individual drivers (see “Environmental Justice” below), the industry will remain viable overall.	28-county study area	Net change in daily taxi/FHV VMT regionwide Net change in daily taxi/FHV VMT in the CBD	-126,993 (-2.9%)	-14,028 (-0.3%)	-73,413 (-1.7%)	-217,477 (-5.0%)	-116,065 (-2.7%)	-4,888 (-1.0%)	-137,815 (-3.2%)	No	No mitigation needed. No adverse effects (see “Environmental Justice” below for mitigation related to effects on taxi and FHV drivers).
	Local Economic Effects	Changes in parking demand near the 60th Street CBD boundary	Area near 60th Street Manhattan CBD boundary	Narrative	Changes in parking demand near the 60th Street Manhattan CBD boundary (including increases just north of 60th Street and decreases just to the south) could jeopardize the viability of one or more parking facilities in the area south of 60th Street but will not create a climate of disinvestment that could lead to adverse effects on neighborhood character.							No	No mitigation needed. No adverse effects
7 – Parks and Recreational Resources		New tolling infrastructure, tolling system equipment, and signage in the southern portion of Central Park	Manhattan CBD	Narrative	The Project will replace four existing streetlight poles at three detection locations in Central Park near 59th Street and on two adjacent sidewalks outside the park's wall. These poles will be in the same locations as existing poles and will not reduce the amount of park space or affect the features and activities of the park. The Project will also place tolling infrastructure beneath the structure of the High Line, outside the park area atop the High Line structure.							No	No mitigation needed. Refer to Final EA Chapter 7, “Parks and Recreational Resources,” for a listing of measures to avoid adverse effects to parks.
8 – Historic and Cultural Resources		New tolling infrastructure and tolling system equipment on or near historic properties	45 historic properties within the Project's Area of Potential Effects (APE)	Narrative	Based on a review of the Project in accordance with Section 106 of the National Historic Preservation Act, FHWA has determined that the Project will have No Adverse Effect on historic properties and the State Historic Preservation Office has concurred.							No	No mitigation needed. Refer to Final EA Chapter 8, “Historic and Cultural Resources,” for a listing of measures to avoid adverse effects to historic properties.

EA CHAPTER / ENVIRONMENTAL CATEGORY	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS			
					A	B	C	D	E	F	G					
9 – Visual Resources		Changes in visual environment resulting from new tolling infrastructure and tolling system equipment	Area of visual effect	Narrative	Infrastructure and equipment will be similar in form to streetlight poles, sign poles, or similar structures already in use throughout New York City. Cameras included in the array of tolling system equipment will use infrared illumination at night to allow images of license plates to be collected without any need for visible light. The Project will have a neutral effect on viewer groups and no adverse effect on visual resources							No	No mitigation needed. No adverse effects			
10 – Air Quality		Increases or decreases in emissions related to truck traffic diversions ...Continued below...	Cross Bronx Expressway at Macombs Road, Bronx, NY	Increase or decrease in Annual Average Daily Traffic (AADT)	3,901	3,996	2,056	1,766	3,757	2,188	3,255	No	No mitigation needed. No adverse effects Enhancements 1. Refer to the overall enhancement on monitoring at the end of this table. 2. TBTA will work with NYC DOHMH to expand the existing network of sensors to monitor priority locations and supplement a smaller number of real-time PM _{2.5} monitors to provide insight into time-of-day patterns to determine whether the changes in air pollution can be attributed to changes in traffic occurring after implementation of the Project. The Project Sponsors will select the additional monitoring locations in consideration of air quality analysis in the EA and input from environmental justice stakeholders. NYS Department of Environmental Conservation (NYSDEC) and other agencies conducting monitoring will also be consulted prior to finalizing the monitoring approach. The Project Sponsors will monitor air quality prior to implementation (setting a baseline), and two years following implementation. Following the initial two-year post-implementation analysis period, and separate from ongoing air quality monitoring and reporting, the Project Sponsors will assess the magnitude and variability of changes in air quality to determine whether more monitoring sites are necessary. Data collected throughout the monitoring program will be made available publicly as data becomes available and analysis is completed. Data from the real-time monitors will be available online continuously from the start of pre-implementation monitoring. ...Continued below...			
				Increase or decrease in daily number of trucks	509	704	170	510	378	536	50					
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No					
			I-95, Bergen County, NJ	Increase or decrease in AADT	9,843	11,459	7,980	5,003	7,078	5,842	12,506	No				
				Increase or decrease in daily number of trucks	801	955	729	631	696	637	-236					
				Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No					
			RFK Bridge, NY	Increase or decrease in AADT	18,742	19,440	19,860	19,932	20,465	20,391	21,006	No				
				Increase or decrease in daily number of trucks	2,257	2,423	2,820	3,479	4,116	3,045	432					

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10 – Air Quality (Cont'd)		Increases or decreases in emissions related to truck traffic diversions (Cont'd)	RFK Bridge, NY (Cont'd)	Potential adverse air quality effects from truck diversions	No	No	No	No	No	No	No	No	3. MTA is currently transitioning its fleet to zero-emission buses, which will reduce air pollutants and improve air quality near bus depots and along bus routes. MTA is committed to prioritizing traditionally underserved communities and those impacted by poor air quality and climate change and has developed an approach that actively incorporates these priorities in the deployment phasing process of the transition. Based on feedback received during the outreach conducted for the Project and concerns raised by members of environmental justice communities, TBTA coordinated with MTA NYCT, which is committed to prioritizing the Kingsbridge Depot and Gun Hill Depot, both located in and serving primarily environmental justice communities in Upper Manhattan and the Bronx, when electric buses are received in MTA's next major procurement of battery electric buses, which began in late 2022. This independent effort by MTA NYCT is anticipated to provide air quality benefits to the environmental justice communities in the Bronx.
11 – Energy		Reductions in regional energy consumption	28-county study area	Narrative	Reductions in regional VMT will reduce energy consumption							No	No mitigation needed. Beneficial effects
12 – Noise	Imperceptible increases or decreases in noise levels resulting from changes in traffic volumes	Bridge and tunnel crossings		Narrative	The maximum noise level increases (2.9 dB(A)), which were predicted adjacent to the Queens-Midtown Tunnel in Tolling Scenario D, will not be perceptible.							No	No mitigation needed. No adverse effects
		Local streets		Narrative	Tolling Scenario C was used to assess noise level changes in Downtown Brooklyn, Tolling Scenario D was used at all other locations assessed. The maximum predicted noise level increases (2.5 dB(A)), which were at Trinity Place and Edgar Street, will not be perceptible. There was no predicted increase in noise levels in the Downtown Brooklyn locations.							No	Enhancement Refer to the overall enhancement on monitoring at the end of this table.
13 – Natural Resources		Construction activities to install tolling infrastructure near natural resources	Sites of tolling infrastructure and tolling system equipment	Narrative	No effects on surface waters, wetlands, or floodplains. Potential effects on stormwater and ecological resources will be managed through construction commitments. The Project is consistent with coastal zone policies.							No	Refer to Final EA Chapter 13, “ Natural Resources ,” for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.
14 – Hazardous Waste		Potential for disturbance of existing contaminated or hazardous materials during construction	Sites of tolling infrastructure and tolling system equipment	Narrative	Soil disturbance during construction and the potential alteration, removal, or disturbance of existing roadway infrastructure and utilities that could contain asbestos-containing materials, lead-based paint, or other hazardous substances. Potential effects will be managed through construction commitments.							No	Refer to Final EA Chapter 14, “ Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials ,” for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.
15 – Construction Effects		Potential disruption related to construction for installation of tolling infrastructure	Sites of tolling infrastructure and tolling system equipment	Narrative	Temporary disruptions to traffic and pedestrian patterns, and noise from construction activities, with a duration of less than one year overall, and approximately two weeks at any given location. These effects will be managed through construction commitments.							No	Refer to Final EA Chapter 15, “ Construction Effects ,” for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.

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17 – Environmental Justice	Low-income drivers	<p>The EA as published in August 2022 found the increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers to the Manhattan CBD who do not have a reasonable alternative for reaching the Manhattan CBD. With further analysis of the population affected and the addition of new mitigation, the Final EA concludes there will not be a disproportionately high and adverse effect on low-income drivers.</p> <p>...Continued below...</p>	28-county study area	Narrative	The increased cost to drivers will occur under all tolling scenarios.							Yes	<p>Mitigation needed. The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than \$60,000. TBTA will coordinate with the New York State Department of Taxation and Finance (NYS DTF) to ensure availability of documentation needed for drivers eligible for the NYS tax credit.</p> <p>TBTA will post information related to the tax credit on the Project website, with a link to the appropriate location on the NYS DTF website to guide eligible drivers to information on claiming the credit.</p> <p>TBTA will eliminate the \$10 refundable deposit currently required for E-ZPass customers who do not have a credit card linked to their account, and which is sometimes a barrier to access.</p> <p>TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-loaded balance), refill their accounts with cash at participating retail locations, and discount plans already in place, about which they may not be aware.</p> <p>TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware.</p> <p>The Project Sponsors commit to establishing an Environmental Justice Community Group that will meet on a quarterly basis, with the first meeting taking place prior to Project implementation, to share updated data and analysis and hear about potential concerns. As it relates to environmental justice, the Project Sponsors will continue providing meaningful opportunities for participation and engagement by sharing updated data and analysis, listening to concerns, and seeking feedback on the toll setting process.</p> <p>...Continued below...</p>

EA CHAPTER / ENVIRONMENTAL CATEGORY	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G		
17 – Environmental Justice (Cont'd)	Low-income drivers (Cont'd)	The EA as published in August 2022 found the increased cost to drivers with the new CBD toll would disproportionately affect low-income drivers to the Manhattan CBD who do not have a reasonable alternative for reaching the Manhattan CBD. With further analysis of the population affected and the addition of new mitigation, the Final EA concludes there would not be a disproportionately high and adverse effect on low-income drivers. (Cont'd).	28-county study area	Narrative	The increased cost to drivers with the new CBD toll will occur under all tolling scenarios (Cont'd).							Yes	<p>TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure; this will benefit low-income drivers who travel during that time.</p> <p>For five years, TBTA commits to a Low-Income Discount Plan for low-income frequent drivers who will benefit from a 25 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month (not including the overnight period, which will already be deeply discounted).</p> <p>Enhancement TBTA will coordinate with MTA NYCT to improve bus service in areas identified in the EA as the Brooklyn and Manhattan Bus Network Redesigns move forward.</p>
	Taxi and FHV drivers	The EA as published in August 2022 found a potential disproportionately high and adverse effect would occur to taxi and FHV drivers in New York City, who largely identify as minority populations, in tolling scenarios that toll their vehicles more than once a day. This would occur in unmodified Tolling Scenarios A, D, and G; for FHV drivers, it would also occur in Tolling Scenarios C and E. The adverse effect would be related to the cost of the new CBD toll and the reduction of VMT for taxis and FHV, which would result in a decrease in revenues that could lead to losses in employment. With the addition of new mitigation, the Final EA concludes there will not be a disproportionately high and adverse effect on taxi and FHV drivers.	New York City	<p>Narrative</p> <p>Potential adverse effect would occur in Tolling Scenarios A, D, and G, which would not have caps or exemptions for taxis and FHV drivers.</p>								Yes	<p>Mitigation needed. TBTA will ensure that a toll structure with tolls of no more than once per day for taxis or FHVs is included in the final CBD toll structure.</p>
				<p>Change in daily taxi/FHV VMT with passengers in the CBD relative to No Action Alternative: Scenarios included in EA</p> <p>Net change in daily taxi/FHV trips to CBD relative to scenarios included in EA: Additional analysis to assess effects of caps or exemptions</p>	-21,498 (-6.6%)	+15,020 (+4.6%)	-11,371 (-3.5%)	-54,476 (-16.8%)	-25,621 (-7.9%)	+4,962 (+1.5%)	-27,757 (-8.6%)		

EA CHAPTER / ENVIRONMENTAL CATEGORY	TOPIC	SUMMARY OF EFFECTS	LOCATION	DATA SHOWN IN TABLE	TOLLING SCENARIO							POTENTIAL ADVERSE EFFECT	MITIGATION AND ENHANCEMENTS
					A	B	C	D	E	F	G		
17 – Environmental Justice (Cont'd)	Increases or decreases in traffic, as a result of traffic diversions, in communities already overburdened by pre-existing air pollution and chronic diseases	Certain environmental justice communities will benefit from decreased traffic; some communities that are already overburdened by pre-existing air pollution and chronic diseases could see an adverse effect as a result of increased traffic.	The specific census tracts that would experience increased or decreased traffic change slightly depending on the tolling scenario. The following communities could have census tracts that merit place-based mitigation: High Bridge, Morrisania and Crotona, Tremont, Hunts Point, Mott Haven, Pelham, Throgs Neck, Northeast Bronx, East Harlem, Randall's Island, Lower East Side/Lower Manhattan, Downtown Brooklyn, Fort Greene, South Williamsburg, Orange, East Orange, Newark, and Fort Lee. (See Note 1.)	Narrative	Census tracts with pre-existing air pollutant and chronic disease burdens that will benefit from reduced traffic, and those affected by increased traffic will vary somewhat, but the identified communities remain largely the same across tolling scenarios. Under Tolling Scenario G, Fort Lee will not experience increases.							Yes	<p>Mitigation needed.</p> <p><u>Regional Mitigation</u></p> <p>TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final toll structure; this will reduce truck diversions.</p> <p>NYCDOT will expand the NYC Clean Trucks Program to accelerate the replacement of eligible diesel trucks, which travel on highways in certain environmental justice communities where the Project is projected to increase truck traffic, to lower-emission electric, hybrid, compressed natural gas, and clean diesel vehicles.</p> <p>NYCDOT will expand its off-hours delivery program in locations where the Project is projected to increase truck diversions to reduce daytime truck traffic and increase roadway safety in certain environmental justice communities.</p> <p><u>Place-based Mitigation</u></p> <p>TBTA will toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then turn to immediately travel south on FDR Drive; this will mitigate modeled non-truck traffic increases on the FDR Drive between the Brooklyn Bridge and East Houston Street.</p> <p>NYCDOT will coordinate to replace diesel-burning TRUs at Hunts Point with cleaner vehicles.</p> <p>NYSDOT will coordinate to expand electric truck charging infrastructure.</p> <p>The Project Sponsors will coordinate to install roadside vegetation to improve near-road air quality.</p> <p>The Project Sponsors will renovate parks and greenspaces.</p> <p>The Project Sponsors will install or upgrade air filtration units in schools.</p> <p>The Project Sponsors will coordinate to expand existing asthma case management programs and create new community-based asthma programming through a neighborhood asthma center in the Bronx.</p>

OVERALL PROJECT ENHANCEMENT. The Project Sponsors commit to ongoing monitoring and reporting of potential effects of the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.

Note:

1 The Project Sponsors have committed to a toll policy that will reduce the overnight toll rate from at least 12:00 a.m. to 4:00 a.m. Based on the modeling undertaken for the tolling scenarios analyzed in the EA, it is expected that this policy will avoid a substantial portion of projected truck diversions, as many of these diverted trucks were projected to occur during the overnight hours. Following the adoption of the CBD tolling structure by the TBTA Board, which will include this overnight exemption/discount, modeling of the adopted tolling structure will be undertaken to determine where truck diversions are expected to occur. After the communities and census tracts are confirmed through the analysis of the adopted toll schedule, specific siting of place-based mitigation measures will require further coordination between the Project Sponsors, the Environmental Justice Community Group (representing the 10-county environmental justice study area), the relevant communities receiving the place-based mitigation, and relevant local and state implementing agencies.

Table 2. Regional and Place-Based Mitigation Measures

MITIGATION MEASURES	BENEFIT AND RESULT OF MITIGATION	5-YEAR FUND-ING	RELEVANT LOCATION(S)	FUNDING SOURCE	IMPLEMENTATION LEAD
Regional Mitigation					
Further reduced overnight toll	Minimize/avoid truck diversions	\$30 million	10-county environmental justice study area	CBD Tolling Program	TBTA
Expand NYC Clean Trucks Program	NOx and PM2.5 reductions from ~500 new clean trucks	\$20 million		CBD Tolling Program	NYCDOT
Expand NYCDOT Off-Hours Delivery Program	Safety and emissions reduction benefits resulting from reduced truck traffic during the day	\$5 million		CBD Tolling Program	NYCDOT
Place-Based Mitigation					
Toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then travel southbound on FDR Drive	25 to 35 percent of the non-truck traffic increases on the FDR Drive could be mitigated	N/A	FDR Drive between the Brooklyn Bridge and East Houston Street	N/A	TBTA
Replacement of Transport Refrigeration Units (TRUs) at Hunts Point Produce Market	Major NOx and PM2.5 reductions from the replacement of up to 1,000 TRUs	\$15 million²	Hunts Point	MTA CMAQ Program	NYCDOT
Implement Electric Truck Charging Infrastructure	NOx and PM2.5 reductions from electric vehicles using 35 new chargers (at seven stations)	\$20 million	After toll rates are set, a process that includes both additional analyses and community input will take place to determine specific locations	\$10 million Federal CRP + \$10 million CBD Tolling Program	NYSDOT
Install Roadside Vegetation to Improve Near-Road Air Quality	Improves near-road air quality by pollutant capture from ~4,000 trees and ~40,000 shrubs	\$10 million		CBD Tolling Program	TBTA with Relevant State and Local Agencies
Renovate Parks and Greenspace in Environmental Justice Communities	Increases overall community well-being. 2-5 park/ greenspace renovations depending on size and complexity.	\$25 million		CBD Tolling Program	TBTA with Relevant State and Local Agencies
Install Air Filtration Units in Schools Near Highways	Removes air pollutants from classrooms. 25-40 schools depending on school size and complexity of existing HVAC system.	\$10 million		CBD Tolling Program	TBTA with Relevant State and Local Agencies
Establish Asthma Case Management Program and Bronx Center	Reduces hospitalizations and doctor visits, decreases days and nights with symptoms and missed school days – program expansion up to 25 schools	\$20 million		CBD Tolling Program	NYC DOHMH

¹ An additional \$5 million has been allocated for mitigation and enhancement measures related to monitoring across other topics, along with \$47.5 million for the low-income toll discount discussed above. Enhancement measures include air quality monitoring that will expand NYC's existing monitoring network. Locations will be selected in consideration of the traffic and air quality analyses in the EA and in coordination with environmental justice stakeholders and relevant state and local agencies. This will complement the regional and place-based mitigation measures related to traffic diversions outlined in Table ES-5 (see Final EA Chapter 10, "Air Quality," for details).

² After three years, any remaining funds designated for TRU replacements may also be used for clean truck replacement vouchers through the NYC Clean Trucks Program.

Table 3. Summary of the CBD Tolling Alternative Implementation Approach for Mitigation and Enhancement Measures

EA CHAPTER – TOPIC	RELEVANT LOCATION(S)	DESCRIPTION OF MITIGATION OR ENHANCEMENT	TIMELINE FOR PRE- AND POST-PROJECT IMPLEMENTATION DATA COLLECTION FOR SPECIFIC MEASURES	THRESHOLD FOR DETERMINING WHEN NEXT STEP(S) WILL BE IMPLEMENTED	TIMING FOR SPECIFIC MEASURES	LEAD AGENCY
4B – Transportation: Highways and Local Intersections – Traffic-Highway Segments	<p>Three highway segments:</p> <ul style="list-style-type: none"> Westbound Long Island Expressway (I-495) near the Queens-Midtown Tunnel (midday) Approaches to westbound George Washington Bridge on I-95 (midday) Southbound and northbound FDR Drive between East 10th Street and Brooklyn Bridge (PM) 	<p>The Project Sponsors will implement a monitoring plan prior to implementation with post-implementation data collected approximately three months after the start of tolling operations and including thresholds for effects; if the thresholds are reached or crossed, the Project Sponsors will implement Transportation Demand Management (TDM) measures, such as ramp metering, motorist information, signage at all identified highway locations with adverse effects upon implementation of the Project. NYSDOT owns and maintains the relevant segments of the Long Island Expressway and I-95. The relevant segment of the FDR is owned by NYSDOT south of Montgomery Street and NYCDOT north of Montgomery Street. Implementation of TDM measures will be coordinated between the highway owners and the owners of any assets relevant to implementing the TDM.</p> <p>Post-implementation of TDM measures, the Project Sponsors will monitor effects and, if needed, TBTA will modify the toll rates, crossing credits, exemptions, and/or discounts within the parameters of the adopted toll schedule to reduce adverse effects.</p>	<p>Exact timing for data collection will be based on seasonality and other factors such as construction activity in accordance with NYCDOT's traffic count best practices. Modeling to quantify delay will be completed within 60 days of data collection.</p> <p>Baseline data will be collected within the six months prior to Project implementation. Post-implementation data will be collected approximately three months after the start of tolling operations.</p> <p>If TDM measures are implemented, additional data will be collected within six months after their implementation to determine whether they have addressed the adverse effect.</p>	<p>An increase in average weekday peak period delay of 2.5 minutes or more.</p> <p>The methods of data collection and evaluation will follow standard practices pursuant to guidelines of NYSDOT Highway Design Manual 5.2 and NYSDOT Data Services procedures.</p>	<p>The monitoring plan will be agreed to by the relevant lead and partnering agencies prior to a decision document being issued.</p> <p>TDM measures will be implemented over a period of two to eighteen months after confirming delays in excess of the threshold for next steps. More readily implementable measures (e.g., variable message signs) will be completed first. NYSDOT currently has two TDM projects progressing on the relevant segments of the LIE and the Cross Bronx (I-95) and TDM measures could be coordinated with these projects, as needed.</p> <p>Modifications to toll rates, crossing credits, exemptions, and/or discounts will be made after confirming delays in excess of the threshold for next steps persist following implementation of TDM measures, to allow for analysis of what the modifications should be and public outreach about any changes.</p>	NYSDOT will lead in partnership with TBTA and NYCDOT.
4B – Transportation: Highways and Local Intersections – Intersections	<p>Four local intersections in Manhattan:</p> <ul style="list-style-type: none"> Trinity Place and Edgar Street (midday) East 36th Street and Second Avenue (midday) East 37th Street and Third Avenue (midday) East 125th Street and Second Avenue (AM, PM) 	<p>NYCDOT will monitor those intersections where potential adverse effects were identified and implement appropriate signal timing adjustments to mitigate the effect, per NYCDOT's normal practice.</p>	<p>Exact timing for data collection will be based on seasonality and other factors such as construction activity in accordance with NYCDOT's traffic count best practices. Modeling to quantify delay will be completed within 60 days of data collection.</p> <p>Baseline data will be collected within the six months prior to Project implementation.</p> <p>Post-implementation data will be collected within the six months after Project implementation.</p>	<p>For intersections at LOS E or F pre-implementation, an increase in average intersection delay of greater than five seconds.</p> <p>For intersections at LOS D or better pre-implementation, an increase of intersection delay of greater than five seconds at LOS to E or F.</p>	<p>Signal timing adjustments will be made within 90 days of confirming delays in excess of the threshold for next steps.</p>	NYCDOT will lead in partnership with TBTA.

EA CHAPTER – TOPIC	RELEVANT LOCATION(S)	DESCRIPTION OF MITIGATION OR ENHANCEMENT	TIMELINE FOR PRE- AND POST-PROJECT IMPLEMENTATION DATA COLLECTION FOR SPECIFIC MEASURES	THRESHOLD FOR DETERMINING WHEN NEXT STEP(S) WILL BE IMPLEMENTED	TIMING FOR SPECIFIC MEASURES	LEAD AGENCY
4C – Transportation: Transit - Transit Elements	Hoboken Terminal–PATH station (NJ) Stair 01/02	TBTA will coordinate with NJ TRANSIT and PANYNJ to monitor pedestrian volumes on Stair 01/02 one month prior to commencing tolling operations to establish a baseline, and two months after Project operations begin. If a comparison of Stair 01/02 passenger volumes before and after Project implementation shows an incremental change that is greater than or equal to 205, then TBTA will coordinate with NJ TRANSIT and PANYNJ to implement improved signage and wayfinding to divert some people from Stair 01/02, and supplemental personnel if needed.	For stair passenger volumes, baseline data will be collected one month prior to commencing tolling operations to establish a baseline, and two months after Project operations begin. Station ridership data is collected and evaluated in an ongoing manner by NJ TRANSIT and PANYNJ.	For signage, if a comparison of Stair 01/02 peak-hour passenger volumes before and after Project implementation shows an incremental change that is greater than or equal to 205. For supplemental personnel, if the threshold for signage has been reached but signage has not yet been installed, and overall ridership at Hoboken Terminal is 90 percent of 2019 levels 30 days prior to commencing tolling operations.	The monitoring plan will be agreed to by TBTA, PANYNJ, and NJ TRANSIT prior to a decision document being issued and MOU will be drafted thereafter. The MOU will be executed within 120 days after toll rates are set. Signage design will commence after the MOU is executed. Signage fabrication and installation will begin immediately after observing passenger volumes in excess of the threshold for next steps. Supplemental personnel, if needed, will be stationed within 45 days after observing passenger volumes in excess of the threshold for next steps. Supplemental personnel will be used until signage is fabricated and installed.	TBTA will lead and coordinate with NJ TRANSIT and PANYNJ.
	42 St-Times Square subway station (Manhattan) Stair ML6/ML8 connecting mezzanine to uptown 1/2/3 lines subway platform	TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to remove the center handrail and standardize the riser, so that the stair meets code without the hand rail. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.	Exact timing will be based on seasonality and other factors such as service changes and construction activity in the station. For stair passenger volumes, baseline data will be collected within the six months prior to Project implementation. Post-implementation data will be collected within the first year after Project implementation. Station ridership data is collected and evaluated in an ongoing manner by MTA NYCT based on turnstile entry and exit data throughout the system.	If a comparison of Stair ML6/ML8 peak hour weekday passenger volumes before and after Project implementation shows an incremental change that is greater than or equal to 92 passengers in the weekday peak hour, and overall ridership at 42 St-Times Square subway station is 90 percent of 2019 levels. The methods of data collection and evaluation will follow standard practices pursuant to guidelines of the <i>CEQR Technical Manual</i> and will be coordinated with NYCT.	Design and resource allocation will begin immediately after the passenger volume threshold is exceeded, and the hand rail will be removed prior to overall ridership at the station exceeding 90 percent of 2019 levels.	TBTA will lead in partnership MTA NYCT.
	Flushing-Main St subway station (Queens)–Escalator E456 connecting street to mezzanine level	TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the speed from 100 feet per minute (fpm) to 120 fpm.	Exact timing will be based on seasonality and other factors such as service changes and construction activity in the station. For escalator passenger volumes, baseline data will be collected within the six months prior to Project implementation. Post-implementation data will be collected within the first year after Project implementation.	If a comparison of Escalator E456 peak hour weekday passenger volumes before and after Project implementation shows an incremental change that is greater than or equal to 26 passengers in the weekday peak hour, and overall ridership at Flushing-Main St subway station is 90 percent of 2019 levels. The methods of data collection and evaluation will follow standard practices pursuant to guidelines of the <i>CEQR Technical Manual</i> and will be coordinated with NYCT.	Prior to overall ridership at the station exceeding 90 percent of 2019 levels.	TBTA will lead in partnership MTA NYCT.

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4C – Transportation: Transit - Transit Elements (Cont'd)	Union Sq subway station (Manhattan)–Escalator E219 connecting the L subway line platform to the Nos. 4/5/6 line mezzanine	TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT will increase the escalator speed from 100 fpm to 120 fpm.	Exact timing will be based on seasonality and other factors such as service changes and construction activity in the station. For escalator passenger volumes, baseline data will be collected within the six months prior to Project implementation. Post-implementation data will be collected within the first year after Project implementation. Station ridership data is collected and evaluated in an ongoing manner by MTA NYCT based on turnstile entry and exit data throughout the system.	If a comparison of Escalator E219 peak hour weekday passenger volumes before and after Project implementation shows an incremental change that is greater than or equal to 21 passengers in the weekday peak hour, and overall ridership at Union Sq subway station is 90 percent of 2019 levels. The methods of data collection and evaluation will follow standard practices pursuant to guidelines of the <i>CEQR Technical Manual</i> and will be coordinated with NYCT.	Prior to overall ridership at the station exceeding 90 percent of 2019 levels.	TBTA will lead in partnership MTA NYCT.
	Court Sq subway station (Queens)–Stair P2/P4 to Manhattan-bound No. 7 line	TBTA will coordinate with MTA NYCT to implement a monitoring plan for this location. The plan will identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA will coordinate with MTA NYCT to construct a new stair from the northern end of the No. 7 platform to the street. The threshold will be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.	Exact timing will be based on seasonality and other factors such as service changes and construction activity in the station. For stair passenger volumes, baseline data will be collected within the six months prior to Project implementation. Post-implementation data will be collected within the first year after Project implementation. Station ridership data is collected and evaluated in an ongoing manner by MTA NYCT based on turnstile entry and exit data throughout the system.	If a comparison of Stair P2/P4 peak hour weekday passenger volumes before and after Project implementation shows an incremental change that is greater than or equal to 101 passengers in the weekday peak hour, and overall ridership at Court Sq subway station is 90 percent of 2019 levels, and if construction by an outside developer is not likely in the foreseeable future. The methods of data collection and evaluation will follow standard practices pursuant to guidelines of the <i>CEQR Technical Manual</i> and will be coordinated with NYCT.	Design and resource allocation will begin immediately after the passenger volume threshold is exceeded and will be implemented prior to overall ridership at the station exceeding 90 percent of 2019 levels (if construction by an outside developer is not likely in the foreseeable future).	TBTA will lead in partnership MTA NYCT.
4E – Transportation: Pedestrians and Bicycles - Pedestrian Circulation	Herald Square/Penn Station NY	NYCDOT will implement a monitoring plan at this location. The plan will include a baseline, specific timing, and a threshold for additional action. If that threshold is reached, NYCDOT will increase pedestrian space on sidewalks and crosswalks via physical widening and/or removing or relocating obstructions.	Exact timing will be based on seasonality and other factors such as construction activity. Baseline data will be collected within the six months prior to Project implementation. Post-implementation data will be collected within the first year after Project implementation.	An additional 221 pedestrians per hour (pph) during the weekday AM peak hour or 204 pph during the PM peak hour along the west sidewalk of Eighth Avenue between West 34th and West 35th Streets, 265 pph during the AM peak hour or 259 pph during the PM peak hour on the north crosswalk at Sixth Avenue and West 34th Street, and/or 221 pph during the AM peak hour on the north crosswalk at Seventh Avenue and West 32nd Street. The methods of data collection and evaluation will follow standard practices pursuant to guidelines of the <i>CEQR Technical Manual</i> and will be coordinated with NYCDOT.	Within 90 days of observing pedestrian counts in excess of the threshold for next steps.	NYCDOT will lead.

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6 – Economic Conditions - Economic Effects of Toll Costs	Manhattan CBD	New in Final EA: The Project Sponsors commit to establishing a Small Business Working Group (SBWG) that will meet six months prior and six months after Project implementation, and annually thereafter, to solicit ongoing input on whether and how businesses are being affected.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Membership will be confirmed six months prior to Project implementation, with the first meeting taking place prior to implementation, the second meeting within the six months after implementation, and meetings annually thereafter.	TBTA will lead, in partnership with NYSDOT and NYCDOT.
	Multiple throughout the study area	New in Final EA: TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final structure; this will also benefit some workers and businesses.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Concurrent with Project Implementation.	TBTA will lead.
7 – Parks and Recreational Resources	Manhattan CBD	Refer to Final EA Chapter 7, “Parks and Recreational Resources,” for a listing of measures to avoid adverse effects to parks.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Will occur during design, development, testing and/or construction as per contract.	TBTA will ensure contractors comply with contract requirements.
8 – Historic and Cultural Resources	45 historic properties within the Project’s Area of Potential Effects (APE)	Refer to Final EA Chapter 8, “Historic and Cultural Resources,” for a listing of measures to avoid adverse effects to historic properties.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Will occur during design, development, testing and/or construction as per contract.	TBTA will ensure contractors comply with contract requirements.
10 – Air Quality	New York City	TBTA will coordinate with NYC DOHMH to expand the City’s existing network of sensors to monitor priority locations, and supplement a smaller number of real-time PM _{2.5} monitors to provide insight into time-of-day patterns to determine whether the changes in air pollution can be attributed to changes in traffic occurring after implementation of the Project. The Project Sponsors will select the additional monitoring locations in consideration of air quality analysis in the EA and input from environmental justice stakeholders. NYSDEC and other agencies conducting monitoring will also be consulted prior to finalizing the monitoring approach. The Project Sponsors will monitor air quality prior to implementation (setting a baseline), and two years following implementation. Following the initial two-year post-implementation analysis period, and separate from ongoing air quality monitoring and reporting, the Project Sponsors will assess the magnitude and variability of changes in air quality to determine whether more monitoring sites are necessary. Data collected throughout the monitoring program will be made available publicly as data becomes available and analysis is completed. Data from the real-time monitors will be available online continuously from the start of pre-implementation monitoring.	In the year prior to Project implementation (setting a baseline), and two years following Project implementation. Locations and durations will be determined in consideration of land uses and non-Project sources of emissions and with input from environmental justice stakeholders.	N/A – No threshold required; implemented under any adopted tolling structure.	Allocation of resources and approval of work plan is underway. Baseline data will be collected in the year prior to Project implementation, but the exact start and duration will be dependent on timing for Project implementation. The monitoring locations will be confirmed at least four months prior to data collection. No less than six months of data will be collected prior to Project implementation.	TBTA will lead in partnership with NYC DOHMH and NYSDEC.

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10 – Air Quality (Cont'd)	Upper Manhattan and the Bronx	MTA is currently transitioning its fleet to zero-emission buses, which will reduce air pollutants and improve air quality near bus depots and along bus routes. MTA is committed to prioritizing traditionally underserved communities and those impacted by poor air quality and climate change and has developed an approach that actively incorporates these priorities in the deployment phasing process of the transition. Based on feedback received during the outreach conducted for the Project and concerns raised by members of environmental justice communities, TBTA coordinated with MTA NYCT, which is committed to prioritizing the Kingsbridge Depot and Gun Hill Depot, both located in and serving primarily environmental justice communities in Upper Manhattan and the Bronx, when electric buses are received in MTA's next major procurement of battery electric buses, which began in late 2022. This independent effort by MTA NYCT is anticipated to provide air quality benefits to the environmental justice communities in the Bronx.	Data on the number and location of MTA's battery electric buses is collected in an ongoing manner.	N/A – No threshold required; implemented under any adopted tolling structure.	Prioritization is complete. Timeline for receipt of buses is the first quarter of 2025.	TBTA will lead in partnership MTA NYCT.
13 – Natural Resources	Sites of tolling infrastructure and tolling system equipment	Refer to Final EA Chapter 13, “ Natural Resources ,” for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Will occur during design, development, testing and/or construction as per contract.	TBTA will ensure contractors comply with contract requirements.
14 – Hazardous Waste	Sites of tolling infrastructure and tolling system equipment	Refer to Final EA Chapter 14, “ Asbestos-Containing Materials, Lead-Based Paint, Hazardous Wastes, and Contaminated Materials ,” for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Will occur during design, development, testing and/or construction as per contract.	TBTA will ensure contractors comply with contract requirements.
15 – Construction Effects	Sites of tolling infrastructure and tolling system equipment	Refer to Final EA Chapter 15, “ Construction Effects ,” for a listing of construction commitments to avoid, minimize, or mitigate potential negative effects.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Will occur during design, development, testing and/or construction as per contract.	TBTA will ensure contractors comply with contract requirements.

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17 – Environmental Justice - Low-income drivers	28-county study area	The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than \$60,000. TBTA will coordinate with the New York State Department of Taxation and Finance (NYS DTF) to ensure availability of documentation needed for drivers eligible for the NYS tax credit.	N/A – No early monitoring required; implemented under any adopted tolling structure. Data on the utilization of tax credits for CBD tolls paid will be collected by NYS DTF.	N/A – No threshold required; implemented under any adopted tolling structure.	Coordination with NYS DTF will begin immediately after Project approval, if approved.	TBTA will lead and coordinate with the NYS DTF.
		TBTA will post information related to the tax credit on the Project website, with a link to the appropriate location on the NYS DTF website to guide eligible drivers to information on claiming the credit.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Information will be made available to the public about the tax credit during the public information campaigns at least 60 days prior to Project implementation. Information will be provided through a combination of methods which may include print publications, radio, billboards, websites, social media, and existing MTA assets such as digital subway station signs and bus advertising. Information will be provided in multiple languages and targeted geographically.	TBTA will lead and coordinate with the NYS DTF.
		TBTA will eliminate the \$10 refundable deposit currently required for E-ZPass customers who do not have a credit card linked to their account, and which is sometimes a barrier to access.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	60 days prior to Project implementation.	TBTA will lead.
		TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-loaded balance), refill their accounts with cash at participating retail locations, and discount plans already in place, about which they may not be aware.	N/A – No early monitoring required; implemented under any adopted tolling structure. Information on the scope and reach of promotion efforts will be documented, and data on E-ZPass account type and volume is collected in an ongoing manner.	N/A – No threshold required; implemented under any adopted tolling structure.	Promotion will be part of the public information campaigns at least 60 days prior to Project implementation.	TBTA will lead.
		TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware.	N/A – No early monitoring required; implemented under any adopted tolling structure. Information on the scope and reach of outreach efforts will be documented.	N/A – No threshold required; implemented under any adopted tolling structure.	Outreach will be part of the public information campaigns at least 60 days prior to Project implementation.	TBTA will lead in partnership with MTA.
		The Project Sponsors commit to establishing an Environmental Justice Community Group that will meet on a quarterly basis, with the first meeting taking place prior to Project implementation. As it relates to environmental justice, the Project Sponsors will continue providing meaningful opportunities for participation and engagement by sharing updated data and analysis, listening to concerns and seeking feedback on the toll setting process.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Membership will be confirmed six months prior to Project implementation, with the first meeting taking place prior to implementation, the second meeting within the six months after implementation, and meetings quarterly thereafter.	TBTA will lead, in partnership with NYSDOT and NYCDOT.
		New in Final EA: TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure; this will benefit low-income drivers who travel during that time.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Concurrent with Project implementation.	TBTA will lead.

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17 – Environmental Justice - Low-income drivers (Cont'd)	28-county study area (Cont'd)	New in Final EA: For five years, TBTA commits to a Low-Income Discount Plan for frequent low-income drivers who will benefit from a 25 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month (not including the overnight period, which will already be deeply discounted).	N/A – No early monitoring required; implemented under any adopted tolling structure; application process will begin several months in advance of the commencement of tolling operations.	N/A – No threshold required; implemented under any adopted tolling structure.	Concurrent with Project implementation.	TBTA will lead.
	New York City	TBTA will coordinate with MTA NYCT to improve bus service in areas identified in the EA as the Brooklyn and Manhattan Bus Network Redesigns move forward.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Coordination between TBTA and NYCT is ongoing and will increase after toll rates are set. The Brooklyn Bus Network Redesign Draft Plan was published in December 2022 and will be refined in 2023. The next step in the Manhattan Bus Network Redesign is an Existing Conditions Report.	TBTA will coordinate with NYCT.
17 – Environmental Justice - Taxi and FHV drivers	New York City	New in Final EA: TBTA will ensure that a toll structure with tolls of no more than once per day for taxis or FHVs is included in the final CBD toll structure.	N/A – No threshold required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Concurrent with Project implementation.	TBTA will lead.
17 – Environmental Justice – Traffic diversion to certain communities already overburdened by pre-existing air pollution and chronic diseases (See Note 1)	Multiple throughout the environmental justice study area	New in Final EA: TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final structure; this will reduce truck diversions.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Concurrent with Project implementation.	TBTA will lead.
		New in Final EA: NYCDOT will expand NYC Clean Trucks Program to accelerate the replacement of eligible old diesel trucks, which travel on highways in certain environmental justice communities where the Project is projected to increase truck traffic, to lower-emission electric, hybrid, compressed natural gas, and clean diesel vehicles.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Engagement with truck-owning companies will start after toll rates are set; implementation will begin within six months of start of tolling operations.	NYCDOT will lead.
		New in Final EA: NYCDOT will expand its off-hours deliveries program in locations where the Project is projected to increase truck traffic to reduce daytime truck traffic and increase roadway safety in certain environmental justice communities.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Engagement with shippers and receivers will start after the toll rates are set; implementation will begin within six months of start of tolling operations.	NYCDOT will lead.
	FDR Drive between the Brooklyn Bridge and East Houston Street	New in Final EA: TBTA will toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then turn to immediately travel south on FDR Drive; this will mitigate modeled non-truck traffic increases on the FDR Drive between the Brooklyn Bridge and East Houston Street.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Concurrent with Project implementation.	TBTA will lead.

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17 – Environmental Justice – Traffic diversion to certain communities already overburdened by pre-existing air pollution and chronic diseases (See Note 1) (Cont'd)	Hunts Point Produce Market	New in Final EA: The Project Sponsors will coordinate to replace diesel-burning TRUs with cleaner vehicles at the Hunts Point Produce Market.	N/A – No early monitoring required; implemented under any adopted tolling structure.	N/A – No threshold required; implemented under any adopted tolling structure.	Engagement with TRU owners and lessees for TRU replacement will start immediately after receiving Project approval.	NYCDOT will lead.
	The specific census tracts that would experience increased or decreased truck traffic change slightly depending on the tolling scenario. The following communities could have census tracts that merit place-based mitigation: High Bridge, Morrisania and Crotona, Tremont, Hunts Point, Mott Haven, Pelham, Throgs Neck, Northeast Bronx, East Harlem, Randall's Island, Downtown Brooklyn, Fort Greene, South Williamsburg, Orange, East Orange, Newark, and Fort Lee. (See Note 2).	New in Final EA: NYSDOT will coordinate to expand electric truck charging infrastructure.	After toll rates are set, analyses of the adopted toll structure will be undertaken as outlined in Appendix 17D to determine where truck diversions are expected to occur. With this analysis and through continued engagement with the Environmental Justice Community Group and other stakeholders, specific locations for place-based mitigation will be determined. Data on the scope and impact of mitigation measures implemented will be collected in an ongoing manner.	N/A – No threshold required; implemented under any adopted tolling structure.	Specific locations will be determined after toll rates are set; implementation will begin within six months of start of tolling operations.	NYSDOT will lead.
		New in Final EA: The Project Sponsors will coordinate to install roadside vegetation to improve near-road air quality.			Specific locations will be determined with the affected communities after toll rates are set; implementation will begin within six months of start of tolling operations.	The Project Sponsors will coordinate with relevant state and local agencies.
		New in Final EA: The Project Sponsors will renovate parks and greenspaces.			Specific locations will be determined with the affected communities after toll rates are set; implementation timing will be determined after locations are confirmed.	The Project Sponsors will coordinate with relevant local agencies.
		New in Final EA: The Project Sponsors will install or upgrade air filtration units in schools.			After the toll rates are set, a site/needs assessment will take place prior to start of tolling operations; implementation timing will be determined after locations are confirmed.	The Project Sponsors will coordinate with relevant local agencies.
		New in Final EA: The Project Sponsors will work with NYC DOHMH to expand their asthma case management program and create new community-based asthma programming through a neighborhood asthma center in the Bronx.			After the toll rates are set, a site/needs assessment will take place prior to start of tolling operations; implementation timing will be determined after locations are confirmed.	The Project Sponsors will coordinate with NYC DOHMH.
Overall Project Enhancement	Manhattan CBD and locations of potential Project effects	The Project Sponsors commit to ongoing monitoring and reporting of potential effects of the Project, including for example, traffic entering the CBD, vehicle-miles traveled in the CBD; transit ridership from providers across the region; bus speeds within the CBD; air quality and emissions trends; parking; and Project revenue. Data will be collected in advance and after implementation of the Project. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.	Baseline data gathering began in 2019 and will continue through Project implementation as data from external sources becomes available (with some data sets published only annually or quarterly) and data analysis is completed. After Project implementation, these data sets will continue to be collected as they become available and new data sets, such as Project revenue, will start being collected.	N/A – No threshold required; implemented under any adopted tolling structure.	The reporting website will begin reporting baseline data and post-implementation data from the tolling system as soon as practicable, after Project implementation. A formal report on the effects of the Project will be issued one year after implementation and then every two years. In addition, the reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable. Updates will be provided on at least a bi-annual basis as data becomes available and analysis is completed. This data will also be used to support an adaptive management approach to monitoring the efficacy of mitigation, and adjustments as warranted.	TBTA will lead in partnership with NYCDOT, NYSDOT, with coordination with other agencies and entities for data as appropriate.

Notes:

- To fund the mitigation measures for this topic the Project Sponsors have committed \$155 million over five years. The Project Sponsors commit to these measures, regardless of the tolling structure eventually adopted. The allocation of funding is described in greater detail in Final EA Chapter 17, "Environmental Justice." An additional \$5 million has been allocated for mitigation and enhancement measures related to monitoring across other topics, along with \$47.5 million for the low-income toll discount.
- The Project Sponsors have committed to a toll policy that will reduce the overnight toll rate from at least 12:00 a.m. to 4:00 a.m. Based on the modeling undertaken for the tolling scenarios analyzed in the EA, it is expected that this policy will avoid a substantial portion of projected truck diversions, as many of these diverted trucks were projected to occur during the overnight hours. Following the adoption of the CBD tolling structure by the TBTA Board, which will include this overnight exemption/discount, modeling of the adopted tolling structure will be undertaken to determine where truck diversions are expected to occur. Following this analysis, specific siting of place-based mitigation measures will require further coordination between the Project Sponsors, the Environmental Justice Community Group (representing the 10-county environmental justice study area), the relevant communities receiving the place-based mitigation, and relevant local and state implementing agencies.

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3. What Has Been Done Since the Final Environmental Assessment (EA)?

A draft FONSI was presented with the Final EA to the public for a 30-day availability period from May 12, 2023 through June 12, 2023. The Notice of Availability and a description of the methods used to notify the public of the public availability period are described in **Appendix B, “Public Noticing of the Availability of the Final Environmental Assessment and Draft Finding of No Significant Impact.”**

Prior to the public availability period, two meetings were held for Federal, New York City, state, and regional transportation agencies and tribal nations, and two meetings for the environmental justice groups; these are also described in **Appendix B**. FHWA and the Project Sponsors considered all submissions received during the 30-day availability period.

4. Has the Final EA Changed as a Result of the Public Availability Period?

The public availability period differed from the early outreach and formal public comment periods in that comments were not solicited. Nevertheless, the Project Sponsors and FHWA considered information received during the public availability period to determine if any new substantive issues were raised that were not addressed in the Final EA. FHWA and the Project Sponsors reviewed approximately 550 submissions and determined that no new substantive issues were raised. All issues were previously addressed in the Final EA.

No changes have been made to the Final EA made available to the public on May 12, 2023.

5. What Are the Next Steps?

To help define the CBD Tolling Program, the Traffic Mobility Act requires the TBTA Board to establish a Traffic Mobility Review Board with six members representing the region who have experience in public finance, transportation, mass transit, or management. The Traffic Mobility Review Board will recommend to the TBTA Board the toll amounts and toll structure, such as crossing credits, discounts, and/or exemptions for existing tolls paid on bridges and tunnels.⁵ The variable pricing structure could vary by time of day, day of week, and day of year and could be different for different types of vehicles. Informed by the Traffic Mobility Review Board’s recommendation, the TBTA Board will approve and adopt a final toll structure following a public hearing in accordance with the New York State Administrative Procedure Act.

⁵ In April 2018 the State of New York imposed a congestion surcharge on taxis and FHV trips that begin in, end in, or pass through Manhattan south of 96th Street. The Traffic Mobility Act requires the Traffic Mobility Review Board to examine potential CBD toll crossing credits, discounts, or exemptions for taxis and FHV. The travel demand modeling conducted for the Final EA assumes that the taxi and FHV surcharge established by 2018 legislation will remain in effect with the CBD Tolling Alternative.

*Central Business District (CBD) Tolling Program***Finding of No Significant Impact**

The adopted TBTA plan will specify any crossing credits, discounts, and/or exemptions for tolls paid on bridges and tunnels; credits, discounts, and/or exemptions for taxis and/or FHV's, which are already subject to surcharges pursuant to the Public Authorities Law; and any other additional potential crossing credits, discounts, and/or exemptions.⁶

The Traffic Mobility Review Board's recommendation will be informed by the results of the Final EA, which includes a Traffic Study, and will consider such factors as traffic patterns, operating costs, public impact, and environmental impacts, including, but not limited to, air quality and emissions trends. The analysis in the Final EA is intended to identify the effects that may result from implementing the CBD Tolling Alternative, including any potential crossing credits, discounts, and/or exemptions. Therefore, the Final EA considered a range of tolling scenarios with different attributes to identify the range of effects that may occur.

The adopted TBTA toll rates and structure will have to be re-evaluated to determine if the decision made in the FONSI is still valid. This requires that the TBTA demonstrate to FHWA that the effects of the final tolling rates and structure are consistent with the effects disclosed in the Final EA and that the mitigation is still valid.

The Project Sponsors and FHWA will enter into a tolling agreement allowing the Project Sponsors to enter into the FHWA Value Pricing Pilot Program (VPPP).

After completion of all federal requirements, including acceptance in VPPP, tolling operations could commence.

⁶ Consolidated Laws of the State of New York, Public Authorities Law, Article 5, Title 11 Section 1270-i.

**APPENDIX A. CENTRAL BUSINESS DISTRICT (CBD) TOLLING PROGRAM FINAL
ENVIRONMENTAL ASSESSMENT**

Provided Electronically on the Project Website.

new.mta.info/project/CBDTP/environmental-assessment

APPENDIX B. PUBLIC NOTICING OF THE AVAILABILITY OF THE FINAL ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT

B.1 NOTICE OF AVAILABILITY OF THE FINAL ENVIRONMENTAL ASSESSMENT (EA) AND DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Notice of Availability of the Final Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI)

**Federal Highway Administration
Triborough Bridge and Tunnel Authority
New York State Department of Transportation
New York City Department of Transportation
Central Business District Tolling Program**


The Triborough Bridge and Tunnel Authority (TBTA, an affiliate of the Metropolitan Transportation Authority), the New York State Department of Transportation (NYSDOT), and the New York City Department of Transportation (NYCDOT) are issuing this notice to advise the public of the availability of the Final Environmental Assessment (EA) and the Federal Highway Administration's (FHWA) draft Finding of No Significant Impact (FONSI) (pursuant to 40 Code of Federal Regulations (CFR) §1501.6 and §1506.6) for the Central Business District (CBD) Tolling Program (the Project). The purpose of the Project is to reduce traffic congestion in the CBD in a manner that will generate revenue for future transportation improvements, pursuant to acceptance of the Project into FHWA's Value Pricing Pilot Program.

In compliance with applicable regulations promulgated by the Council on Environmental Quality and FHWA pursuant to the National Environmental Policy Act (NEPA), respectively, 40 CFR Parts 1500-1508 and 23 CFR Part 771, the Final EA was prepared to evaluate the potential environmental impacts of, and identify any mitigation measures for, the Project, in consideration of public and agency input, and responds to comments received from the public and agencies on the EA that was published in August 2022. FHWA intends to apply Title 23 United States Code (USC) § 139(l), Limitations on Claims, to any decision it may issue with respect to the proposed public transportation project.


As a project requiring FHWA approval, the Project is subject to the requirements of Section 4(f) of the U.S. Department of Transportation Act of 1966 (now codified in 23 U.S.C. §138 and 49 U.S.C. §303), and the FHWA implementing regulations, 23 CFR Part 774. In accordance with the applicable regulations, and as documented in the Final EA, the FHWA makes a de minimis impact finding for the Section 4(f) use of Central Park and the High Line by the Project.

Availability of the Final EA and Draft FONSI


The official 30-day public availability period for the Final EA and draft FONSI for the Project will begin on **May 12, 2023** and will end on **June 12, 2023**. The draft FONSI and Final EA will be available to the public online at mta.info/CBDTP, and in hardcopy at TBTA, NYSDOT, and NYCDOT offices and FHWA division offices in New York, New Jersey, and Connecticut. In-person assistance with accessing the documents online will be available at specific libraries throughout New York, New Jersey, and Connecticut. For the list of locations where the documents are available, visit mta.info/CBDTP or contact the CBDTP Team at 646-252-7440.




U.S. Department of Transportation
Federal Highway Administration



Department of
Transportation



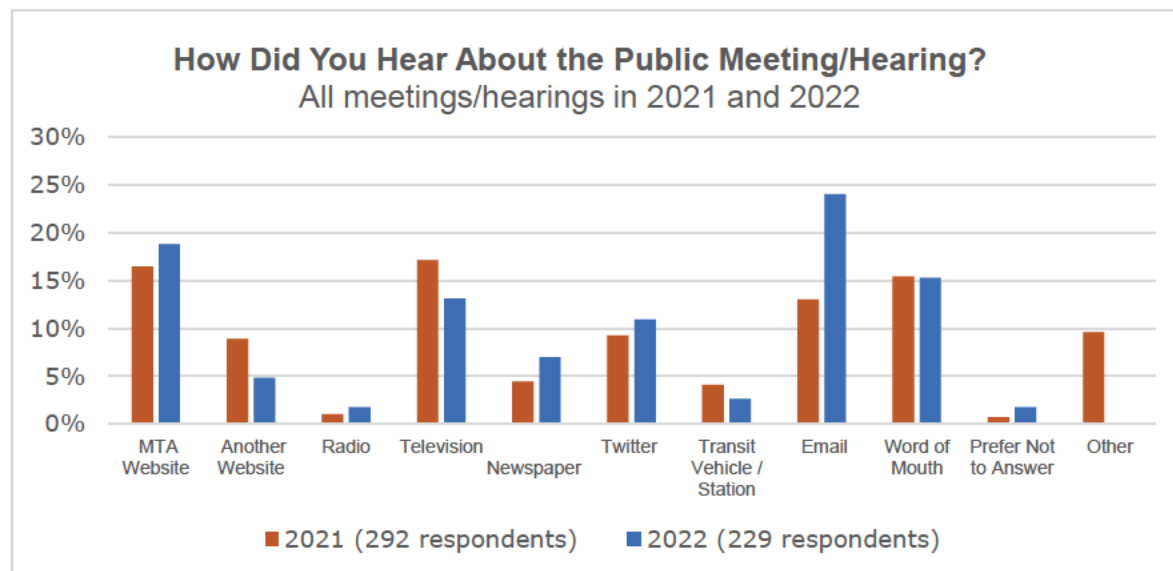


B.2 METHODS USED FOR DISTRIBUTING THE PUBLIC NOTICE

The Project Sponsors notified the public of availability of the Final EA and draft FONSI using many of the same tools that were most successful during the early outreach and during the formal comment period for the EA released in August 2022. The methods used in May 2023 were more expansive than the 2021 early outreach, and more focused than the 2022 formal comment period.

In developing the noticing plan for the Final EA and draft FONSI, the Project Sponsors built on the further-developed level of awareness of the Project and where to look for Project information among members of the public. In particular, as reflected in surveys of meeting and hearing participants, and as summarized in **Figure B-1**, e-mail, word of mouth, the MTA website, and television were the top methods by which participants heard about meetings and hearings. These methods and those that enable them (such as press releases that lead to television coverage), were used again, as part of a wide variety of notification methods. The specific methods used for the May 2023 Notice of Availability (NOA) are listed in a **Table B-1**.

Figure B-1. How the Public Found Out About CBDTP Meetings and Hearings



Source: CBDTP Webinar and Hearing Participant Surveys, 2021 & 2022

Table B-1 Methods Used for Public Availability Noticing & Previous Noticing

METHODS	EARLY OUTREACH 2021 Q4	COMMENT PERIOD 2022 Q3	PUBLIC AVAILABIL- ITY 2023 Q2	NOTES ON METHODS USED FOR PUBLIC AVAILABILITY NOTICING
Newspaper advertisements – Notice of Availability (NOA)	X	X	X	The NOA was advertised in the same publications used in both 2021 and 2022 (including 16 non-English publications) along with 8 additional community publications that MTA recently added to its lists for publication of public notices across all agencies.
Radio advertisements	X			Surveys of public meeting participants found radio to be ineffective.
Press releases	X	X	X	
E-mails to elected officials	X	X	X	
E-mails to CBDTP e-mail list	X	X	X	The email subscriber list continues to grow and now has more than 18,000 subscribers. People could sign up via the Project website, when providing feedback, or when signing up for public meetings.
E-mails to EJTAG & EJSWG members		X	X	These groups were not yet formed during the early outreach. However, the early outreach also served the purpose of soliciting invitations and recommendations for the EJ SWG.
E-mails to NYC Taxi & Limousine Commission licensees		X	X	These e-mails were translated into 10 languages beyond English.
E-mails to MPOs and request they share	X	X	X	
E-mails to the Federal, NY State, regional transportation and NYC agencies that participated in NEPA process	X	X	X	
Social media posts via the Project Sponsors' channels	X	X	X	
Updates to the CBDTP website	X	X	X	
Banner on the MTA website		X	X	
Banner on the OMNY website (MTA's contactless fare payment system)		X		Created confusion among customers and resulted in OMNY questions being sent to CBDTP.
Digital ads throughout the MTA system (bus, subway, LIRR, MNR)	X	X	X	Digital advertising has expanded throughout the MTA system and does not create clutter that conflicts or encroaches on travel advisories.
Physical ads throughout the MTA system (bus, subway, LIRR, MNR)	X	X		Paper posters compete for limited space with service change advisories and have a tendency to be pulled down and litter platforms and tracks. MTA customers were reached through in-system digital advertising.
Tolls-By-Mail inserts and printed alerts on E-ZPass statements		X		Lead time and cyclical nature of statements make it difficult to ensure customers would receive notification at the very start of the public review period. NYCSC customers were reached through e-mails, website banners, and an alert in the TollsNY app (per below).
Texts to NYCSC customers		X		NYCSC customers were reached through e-mails, website banners, and an alert in the TollsNY app – texts can be felt as intrusive and may have caused some customers to unsubscribe if sent too frequently.
Banner on the Tolls-By-Mail and E-ZPass websites		X	X	
E-mails to NYCSC customers		X	X	Sent to over 3.5 million customers.
Alert in TollsNY app		X	X	
Postcard mailings to the five blocks north and south of 60 th Street		X		We did not receive a substantial number of comments related specifically to this area. Further, there is no new information in the Final EA specifically related to residents and businesses in this area. Hundreds of the postcards were returned to sender.
Total Methods Used	11	20	15	

B.3 AVAILABILITY OF THE FINAL EA AND DRAFT FONSI

The Final EA and draft FONSI were made available for public viewing on the Project's website: mta.info/CBDTP. In addition to English, the Final EA's **"Executive Summary"** and the **"Draft FONSI"** were translated into eight other languages. Print copies of the Final EA and draft FONSI were available for public viewing at the FHWA Division Offices in New York, New Jersey, and Connecticut, and the Project Sponsors' three offices, as listed in **Table B-2**.

The Final EA and draft FONSI were also available for public viewing electronically at the 28 libraries throughout the region where the EA was available for review in 2022. (The documents could be accessed using any computer or device with internet access at these libraries, and staff were available to provide assistance in accessing the documents from the Project website.) The Notice of Availability (NOA) was also posted at the 28-county clerk and government offices where the EA was available for review in 2022. As described in the NOA, the list of locations where the documents were available was posted to the Project website and could also be obtained by contacting the CBDTP Team via phone.

Print copies of specific comments and responses on the August 2022 EA, as compiled in **Appendix 18C, "Comments and Responses"** and **Appendix 18D, "Form Letter Submissions"** of the Final EA, were provided upon request.

Table B-2. Repositories for Reviewing the Final Environmental Assessment and the Draft FONSI

REPOSITORY	CITY OR COUNTY/STATE	FACILITY	ADDRESS
FHWA	New York (Albany)	FHWA New York Division Office	Leo W. O'Brien Federal Building, 11A Clinton Avenue, Room 719 Albany, NY 12207 (518) 431-4127
	New Jersey (Trenton)	FHWA New Jersey Division Office	840 Bear Tavern Road, Suite 202 West Trenton, NJ 08628 (609) 637-4200
	Connecticut (Hartford)	FHWA Connecticut Division Office	450 Main Street, Suite 612 Hartford, CT 06103 (860) 659-6703
TBTA	New York (New York City)		2 Broadway New York, NY 10004 (212) 878-7000
NYSDOT	New York (New York City)	Region 11	Hunter's Point Plaza 47-40 21st St. Long Island City, NY 11101 (718) 482-4526
NYCDOT	New York (New York City)		55 Water Street New York, NY 10041 (212) 639-9675

B.4 COORDINATION WITH STAKEHOLDER GROUPS

B.4.1 Agency Coordination

Immediately prior to the release of the Final EA and draft FONSI, FHWA and the Project Sponsors met with the agencies invited to participate in the NEPA process, as described in **Chapter 18, “Agency Coordination and Public Participation”** of the Final EA. The following two meetings were held to make the agencies aware of the availability period and provide a review of the Final EA:

- May 9, 2023, a third meeting for the Federal and New York State resource agencies
- May 11, 2023, a third meeting for the regional transportation agencies and tribal nations throughout the 28 counties and New York City

B.4.2 Environmental Justice Advisory and Working Groups

As described in **Chapter 18, “Agency Coordination and Public Participation”** of the Final EA, during preparation of the EA, two environmental justice groups were established to allow for more in-depth discussion and meaningful engagement with the Project Sponsors and FHWA: an Environmental Justice Technical Advisory Group and Environmental Justice Stakeholder Working Group. Shortly before the release of the Final EA and draft FONSI, two additional meetings were held with these groups to make them aware of the availability period and provide a review of the Final EA:

- May 11, 2023, a fourth meeting was held for the Environmental Justice Stakeholder Working Group
- May 12, 2023, an eighth meeting was held for the Environmental Justice Technical Advisory Group

Table 10B-1. Upper East Side Study Area – No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	E 60th Street & Queensboro Bridge Exit	0	0	807	618	Pass	NA	0	0	940	711	Pass	NA	0	0	473	243	Pass	NA	0	0	437	366	Pass	NA
2	E 60th Street & 3rd Ave	C	C	1720	1439	Pass	NA	C	C	1582	1238	Pass	NA	C	B	1477	939	Pass	NA	C	B	1676	1189	Pass	NA
3	E 60th Street & York Ave	C	C	1386	1128	Pass	NA	C	C	1653	1224	Pass	NA	C	B	1691	1151	Pass	NA	C	C	1402	1002	Pass	NA
4	E 59th Street & 2nd Ave	E	C	3246	2455	Pass	NA	D	C	3686	1731	Pass	NA	E	B	3803	1041	Pass	NA	C	A	3476	1035	Pass	NA
5	E 60th Street & 2nd Ave	C	C	2829	2368	Pass	NA	C	C	3188	2041	Pass	NA	C	B	3092	1109	Pass	NA	C	B	2939	976	Pass	NA
6	E 60th Street & 1st Ave	C	C	1740	1274	Pass	NA	C	C	1667	1158	Pass	NA	B	B	1469	847	Pass	NA	B	B	1727	1434	Pass	NA
7	E 60th Street & Lexington Ave	C	C	1495	1266	Pass	NA	C	C	1345	1006	Pass	NA	B	B	1205	711	Pass	NA	C	C	1640	903	Pass	NA
8a	E 60th Street & Park Ave NB	C	C	1476	1273	Pass	NA	C	C	1305	1037	Pass	NA	C	C	1474	1024	Pass	NA	C	C	974	822	Pass	NA
8b	E 60th Street & Park Ave SB	C	C	1754	1701	Pass	NA	B	B	1344	1225	Pass	NA	B	B	1325	1105	Pass	NA	B	B	1368	1094	Pass	NA
9	E 60th Street & Madison Ave	B	B	1392	1172	Pass	NA	B	B	1074	828	Pass	NA	C	B	1372	1007	Pass	NA	B	B	1374	1120	Pass	NA
10	E 62nd Street & Queensboro Bridge Exit	B	B	1638	1200	Pass	NA	B	B	1795	1645	Pass	NA	B	A	1308	672	Pass	NA	B	B	1880	2032	Pass	NA
11	E 60th Street & 5th Ave	C	C	1607	1313	Pass	NA	C	C	1270	955	Pass	NA	C	B	1209	827	Pass	NA	C	B	1508	956	Pass	NA
12	E 63rd Street & York Ave	C	C	2394	2086	Pass	NA	C	C	2457	1988	Pass	NA	D	D	2374	1869	Fail	Pass	C	C	2021	1437	Pass	NA
13	E 53rd Street & FDR Drive	0	0	491	454	Pass	NA	0	0	502	434	Pass	NA	0	0	528	444	Pass	NA	0	0	523	417	Pass	NA
14	E 61st Street & 5th Ave	C	B	1125	862	Pass	NA	B	B	918	629	Pass	NA	C	B	832	518	Pass	NA	C	B	1160	658	Pass	NA
15	E 65th Street & 5th Ave	D	C	1981	1841	Pass	NA	C	C	1555	1441	Pass	NA	C	C	1819	1701	Pass	NA	C	C	1680	1555	Pass	NA
16	E 66th Street & 5th Avenue	C	C	1590	1420	Pass	NA	C	C	1502	1365	Pass	NA	C	C	1616	1479	Pass	NA	C	C	1529	1360	Pass	NA
17	E 79th Street & 5th Ave	D	D	2012	1839	Fail	Pass	D	C	1920	1771	Pass	NA	D	C	2044	1879	Pass	NA	C	C	1653	1491	Pass	NA
18	E 71st Street & York Ave	C	C	1275	1120	Pass	NA	C	C	1361	1151	Pass	NA	C	C	1430	1183	Pass	NA	C	C	963	642	Pass	NA

Table 10B-2. Upper East Side Study Area – No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment		AM HDDV		AM Screen		MD LOS		MD Increment		MD HDDV		MD Screen		PM LOS		PM Increment		PM HDDV		PM Screen		LN LOS		LN Increment		LN HDDV		LN Screen	
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT
1	E 60th Street & Queensboro Bridge Exit	0	0	-6	-4	0	-10	Pass	NA	0	0	-1	-4	0	-5	Pass	NA	0	0	0	-3	-1	-4	Pass	NA	0	0	-2	-1	0	-3	Pass	NA
2	E 60th Street & 3rd Ave	C	C	-21	-11	-1	-33	Pass	NA	C	C	-28	-11	0	-39	Pass	NA	C	B	-17	-16	0	-33	Pass	NA	C	B	-15	-6	0	-21	Pass	NA
3	E 60th Street & York Ave	C	C	-3	-6	0	-9	Pass	NA	C	C	-4	-7	0	-11	Pass	NA	C	B	-4	-6	0	-10	Pass	NA	C	C	-2	-4	0	-6	Pass	NA
4	E 59th Street & 2nd Ave	E	C	-53	-27	-3	-83	Pass	NA	D	C	-212	-30	-11	-253	Pass	NA	E	B	-303	-79	-8	-390	Pass	NA	C	A	-65	-31	-16	-112	Pass	NA
5	E 60th Street & 2nd Ave	C	C	-36	-25	-2	-63	Pass	NA	C	C	-99	-31	-1	-131	Pass	NA	C	B	-135	-82	-7	-224	Pass	NA	C	B	-53	-17	-16	-86	Pass	NA
6	E 60th Street & 1st Ave	C	C	-31	-19	-2	-52	Pass	NA	C	C	-46	-13	-3	-62	Pass	NA	B	B	-17	-21	-1	-39	Pass	NA	B	B	-6	-4	0	-10	Pass	NA
7	E 60th Street & Lexington Ave	C	C	-15	-10	-1	-26	Pass	NA	C	C	-22	-10	-1	-33	Pass	NA	B	B	-22	-13	0	-35	Pass	NA	C	C	-11	-10	-1	-22	Pass	NA
8a	E 60th Street & Park Ave NB	C	C	-60	-22	-4	-86	Pass	NA	C	C	-23	-11	-2	-36	Pass	NA	C	C	-8	-14	0	-22	Pass	NA	C	C	-6	-7	0	-13	Pass	NA
8b	E 60th Street & Park Ave SB	C	C	-3	-1	0	-4	Pass	NA	B	B	-5	-3	0	-8	Pass	NA	B	B	-2	-5	0	-7	Pass	NA	B	B	-3	-2	0	-5	Pass	NA
9	E 60th Street & Madison Ave	B	B	-16	-17	-1	-34	Pass	NA	B	B	-11	-10	-1	-22	Pass	NA	C	B	-7	-25	0	-32	Pass	NA	B	B	-3	-6	0	-9	Pass	NA
10	E 62nd Street & Queensboro Bridge Exit	B	B	-4	-4	0	-8	Pass	NA	B	B	-1	0	0	-1	Pass	NA	B	A	0	-2	0	-2	Pass	NA	B	B	-1	0	0	-1	Pass	NA
11	E 60th Street & 5th Ave	C	C	-8	-25	0	-33	Pass	NA	C	C	-7	-16	0	-23	Pass	NA	C	B	-10	-34	0	-44	Pass	NA	C	B	-3	-11	-1	-15	Pass	NA
12	E 63rd Street & York Ave	C	C	-2	-5	0	-7	Pass	NA	C	C	-4	-6	0	-10	Pass	NA	D	D	-3	-5	0	-8	Fail	Pass	C	C	-4	-2	0	-6	Pass	NA
13	E 53rd Street & FDR Drive	0	0	-1	0	0	-1	Pass	NA	0	0	-1	-2	0	-3	Pass	NA	0	0	0	-1	0	-1	Pass	NA	0	0	-1	0	0	-1	Pass	NA
14	E 61st Street & 5th Ave	C	B	-6	-23	0	-29	Pass	NA	B	B	-7	-15	0	-22	Pass	NA	C	B	-7	-20	0	-27	Pass	NA	C	B	-2	-10	-2	-14	Pass	NA
15	E 65th Street & 5th Ave	D	C	-2	-12	0	-14	Pass	NA	C	C	-4	-7	0	-11	Pass	NA	C	C	-1	-6	0	-7	Pass	NA	C	C	-1	-4	0	-5	Pass	NA
16	E 66th Street & 5th Avenue	C	C	-5	-13	0	-18	Pass	NA	C	C	-6	-7	0	-13	Pass	NA	C	C	-1	-6	0	-7	Pass	NA	C	C	-1	-4	0	-5	Pass	NA
17	E 79th Street & 5th Ave	D	D	-5	-13	0	-18	Fail	Pass	D	C	-2	-6	0	-8	Pass	NA	D	C	-2	-5	0	-7	Pass	NA	C	C	-1	-4	0	-5	Pass	NA
18	E 71st Street & York Ave	C	C	-3	-5	0	-8	Pass	NA	C	C	-4	-5	0	-9	Pass	NA	C	C	-5	-6	0	-11	Pass	NA	C	C	-4	-6	0	-10	Pass	NA

Table 10B-3. Long Island City Study Area - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1a	Pulaski Bridge / 11th Street & Jackson Avenue	E	E	2473	2447	Fail	Pass	D	D	2030	2038	Fail	Pass	D	D	2690	2739	Fail	Pass	0	0	0	0	Pass	NA
1b	11th Street & 48TH Avenue	C	C	1305	1293	Pass	NA	C	C	1060	1068	Pass	NA	B	B	1361	1363	Pass	NA	0	0	0	0	Pass	NA
2	50th Avenue @ Vernon Blvd	B	B	544	553	Pass	NA	B	B	586	635	Pass	NA	B	B	648	739	Pass	NA	0	0	0	0	Pass	NA
3	Green Street & McGuinness Blvd	C	C	2487	2442	Pass	NA	C	C	1837	1774	Pass	NA	D	D	2201	2068	Fail	Pass	0	0	0	0	Pass	NA
4	McGuinness Blvd & Freeman Street	0	0	2723	2647	Pass	NA	0	0	2097	1965	Pass	NA	0	0	2570	2401	Pass	NA	0	0	0	0	Pass	NA
5	21st Street & 49th Avenue	D	D	948	941	Fail	Pass	D	C	875	880	Pass	NA	B	B	1108	1150	Pass	NA	0	0	0	0	Pass	NA
7	11th Street & Borden Avenue	0	0	1443	1409	Pass	NA	0	0	1696	1784	Pass	NA	0	0	1529	1670	Pass	NA	0	0	0	0	Pass	NA
8a	Van Dam Street & QMT Expy	D	C	2344	2200	Pass	NA	D	B	2192	2009	Pass	NA	C	C	2072	1852	Pass	NA	0	0	0	0	Pass	NA
8b	Van Dam Street & Borden Avenue	E	E	1376	1290	Fail	Pass	D	D	1276	1077	Fail	Pass	C	C	1373	1251	Pass	NA	0	0	0	0	Pass	NA
9	Jackson Ave / Northern Blvd & Queens Plaza	C	C	2556	2416	Pass	NA	0	0	2497	1966	Pass	NA	0	0	2582	1908	Pass	NA	0	0	0	0	Pass	NA
11a	Thomson Avenue & Dutch Kills Street	0	0	1681	1669	Pass	NA	C	C	1530	1483	Pass	NA	C	C	2143	2144	Pass	NA	0	0	0	0	Pass	NA
11b	Thomson Avenue & Dutch Kills Street	0	0	2523	2358	Pass	NA	0	0	2390	2344	Pass	NA	0	0	2798	2799	Pass	NA	0	0	0	0	Pass	NA
12	21st Street & Queens Plaza N	D	D	1998	1915	Fail	Pass	D	D	1723	1710	Fail	Pass	E	E	2298	2198	Fail	Pass	0	0	0	0	Pass	NA

Table 10B-4. Long Island City Study Area - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment		AM HDDV		AM Screen		MD LOS		MD Increment		MD HDDV		MD Screen		PM LOS		PM Increment		PM HDDV		PM Screen		LN LOS		LN Increment		LN HDDV		LN Screen	
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT
1a	Pulaski Bridge / 11th Street & Jackson Avenue	E	E	0	0	0	0	Fail	Pass	D	D	0	0	0	0	Fail	Pass	D	D	0	0	0	0	Fail	Pass	0	0	0	0	0	0	Pass	NA
1b	11th Street & 48th Avenue	C	C	0	0	0	0	Pass	NA	C	C	0	0	0	0	Pass	NA	B	B	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA
2	50th Avenue @ Vernon Blvd	B	B	1	-1	0	0	Pass	NA	B	B	2	1	0	3	Pass	NA	B	B	3	1	0	4	Pass	NA	0	0	0	0	0	0	Pass	NA
3	Green Street & McGuinness Blvd	C	C	-2	-1	0	-3	Pass	NA	C	C	-6	-1	-1	-8	Pass	NA	D	D	-4	0	0	-4	Fail	Pass	0	0	0	0	0	0	Pass	NA
4	McGuinness Blvd & Freeman Street	0	0	-5	0	0	-5	Pass	NA	0	0	-11	-2	0	-13	Pass	NA	0	0	-6	-1	0	-7	Pass	NA	0	0	0	0	0	0	Pass	NA
5	21st Street & 49th Avenue	D	D	0	0	0	0	Fail	Pass	D	C	0	0	0	0	Pass	NA	B	B	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA
7	11th Street & Borden Avenue	0	0	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA
8a	Van Dam Street & QMT Expy	D	C	-10	-2	-1	-13	Pass	NA	D	B	-16	-2	-1	-19	Pass	NA	C	C	-12	-6	-1	-19	Pass	NA	0	0	0	0	0	0	Pass	NA
8b	Van Dam Street & Borden Avenue	E	E	-7	-1	0	-8	Fail	Pass	D	D	-14	-3	-2	-19	Fail	Pass	C	C	-9	-5	-1	-15	Pass	NA	0	0	0	0	0	0	Pass	NA
9	Jackson Ave / Northern Blvd & Queens Plaza	C	C	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA
11a	Thomson Avenue & Dutch Kills Street	0	0	-1	-1	0	-2	Pass	NA	C	C	-2	-1	0	-3	Pass	NA	C	C	0	1	0	1	Pass	NA	0	0	0	0	0	0	Pass	NA
11b	Thomson Avenue & Dutch Kills Street	0	0	-1	-1	0	-2	Pass	NA	0	0	-3	-3	-1	-7	Pass	NA	0	0	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA
12	21st Street & Queens Plaza N	D	D	0	0	0	0	Fail	Pass	D	D	-2	-1	0	-3	Fail	Pass	E	E	0	-1	0	-1	Fail	Pass	0	0	0	0	0	0	Pass	NA

Table 10B-5. Lower Manhattan Study Area – No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	Trinity Place & Edgar Street	B	B	117	97	Pass	NA	C	C	364	462	Pass	NA	C	C	144	138	Pass	NA	0	0	0	0	Pass	NA
2	Trinity Place & Rector Street	C	C	251	228	Pass	NA	C	C	508	584	Pass	NA	C	C	264	236	Pass	NA	0	0	0	0	Pass	NA
3a	HCT Entrance/Exit & West Street	C	C	4216	4200	Pass	NA	B	B	4055	4205	Pass	NA	A	A	3511	3597	Pass	NA	0	0	0	0	Pass	NA
3b	HCT Exit & West Street & West Thams Street	C	C	3339	3310	Pass	NA	C	C	3265	3237	Pass	NA	C	C	2373	2240	Pass	NA	0	0	0	0	Pass	NA
4	Chambers Street & Centre Street	C	C	1588	1489	Pass	NA	C	C	1409	988	Pass	NA	E	D	1873	1545	Fail	Pass	0	0	0	0	Pass	NA
5a	Canal Street & Hudson Street/Holland Tunnel On-Ramp	C	C	2586	2324	Pass	NA	D	D	1988	1525	Fail	Pass	C	C	1533	1452	Pass	NA	0	0	0	0	Pass	NA
5b	Canal Street & Holland Tunnel On-Ramp	E	E	2013	1905	Fail	Pass	C	B	1319	1091	Pass	NA	F	F	1889	1829	Fail	Pass	0	0	0	0	Pass	NA
7a	Canal Street S & West Street	D	D	5849	5740	Fail	Pass	C	C	4638	4610	Pass	NA	D	D	5146	4982	Fail	Pass	0	0	0	0	Pass	NA
9	West Street & Albany Street	C	C	4436	4422	Pass	NA	C	C	4149	4373	Pass	NA	C	C	4049	4070	Pass	NA	0	0	0	0	Pass	NA
10	West Street & Vesey Street	C	C	4668	4628	Pass	NA	C	C	4562	4701	Pass	NA	C	C	4373	4360	Pass	NA	0	0	0	0	Pass	NA
11	West Street & Chambers Street	D	C	5053	4961	Pass	NA	C	C	4845	4848	Pass	NA	D	C	4840	4721	Pass	NA	0	0	0	0	Pass	NA
14	Canal Street/Manhattan Bridge & Bowery	D	C	8718	8252	Pass	NA	C	B	2774	1769	Pass	NA	C	B	3276	2217	Pass	NA	0	0	0	0	Pass	NA
15	Manhattan Bridge & Bowery	C	B	1421	1149	Pass	NA	B	A	1162	630	Pass	NA	B	B	1395	792	Pass	NA	0	0	0	0	Pass	NA
18	6th Avenue & Watts Street	B	B	1884	1739	Pass	NA	B	B	1784	1525	Pass	NA	C	C	997	851	Pass	NA	0	0	0	0	Pass	NA
19	Canal Street & 6th Avenue/Laight Street	E	D	3634	3451	Fail	Pass	C	C	2555	2186	Pass	NA	C	C	2932	2631	Pass	NA	0	0	0	0	Pass	NA

Table 10B-6. Lower Manhattan Study Area – No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDOV	AM Screen		MD LOS		MD Increment			MD HDOV	MD Screen		PM LOS		PM Increment			PM HDOV	PM Screen		LN LOS		LN Increment			LN HDOV	LN Screen	
		NB	BD	MT	Bus	HT		LOS	HDOV	NB	BD	MT	Bus	HT		LOS	HDOV	NB	BD	MT	Bus	HT		LOS	HDOV	NB	BD	MT	Bus	HT		LOS	HDOV
1	Trinity Place & Edgar Street	B	B	-1	-10	0	-11	Pass	NA	C	C	10	-11	0	-1	Pass	NA	C	C	0	-4	0	-4	Pass	NA	0	0	0	0	0	0	Pass	NA
2	Trinity Place & Rector Street	C	C	-2	-8	0	-10	Pass	NA	C	C	3	14	0	17	Pass	NA	C	C	-1	-3	0	-4	Pass	NA	0	0	0	0	0	0	Pass	NA
3a	HCT Entrance/Exit & West Street	C	C	-2	8	0	6	Pass	NA	B	B	1	12	0	13	Pass	NA	A	A	0	17	0	17	Pass	NA	0	0	0	0	0	0	Pass	NA
3b	HCT Exit & West Street & West Thames Street	C	C	-1	0	0	-1	Pass	NA	C	C	-3	-1	0	-4	Pass	NA	C	C	-2	-4	0	-6	Pass	NA	0	0	0	0	0	0	Pass	NA
4	Chambers Street & Centre Street	C	C	-23	-40	0	-63	Pass	NA	C	C	-32	-152	0	-184	Pass	NA	E	D	-61	-124	0	-185	Fail	Pass	0	0	0	0	0	0	Pass	NA
5a	Canal Street & Hudson Street/Holland Tunnel On-Ramp	C	C	-17	-13	-1	-31	Pass	NA	D	D	-42	-6	-8	-56	Fail	Pass	C	C	-2	-1	0	-3	Pass	NA	0	0	0	0	0	0	Pass	NA
5b	Canal Street & Holland Tunnel On-Ramp	E	E	-13	-9	-3	-25	Fail	Pass	C	B	-33	-6	-10	-49	Pass	NA	F	F	-2	-1	0	-3	Fail	Pass	0	0	0	0	0	0	Pass	NA
7a	Canal Street S & West Street	D	D	-6	-5	0	-11	Fail	Pass	C	C	-5	-1	0	-6	Pass	NA	D	D	-5	-4	0	-9	Fail	Pass	0	0	0	0	0	0	Pass	NA
9	West Street & Albany Street	C	C	0	0	0	0	Pass	NA	C	C	6	4	0	10	Pass	NA	C	C	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA
10	West Street & Vesey Street	C	C	-1	-1	0	-2	Pass	NA	C	C	5	2	0	7	Pass	NA	C	C	-1	-1	0	-2	Pass	NA	0	0	0	0	0	0	Pass	NA
11	West Street & Chambers Street	D	C	-4	-2	0	-6	Pass	NA	C	C	1	0	0	1	Pass	NA	D	C	-2	-4	0	-6	Pass	NA	0	0	0	0	0	0	Pass	NA
14	Canal Street/Manhattan Bridge & Bowery	D	C	-44	-14	-4	-62	Pass	NA	C	B	-127	-31	-9	-167	Pass	NA	C	B	-48	-35	-1	-84	Pass	NA	0	0	0	0	0	0	Pass	NA
15	Manhattan Bridge & Bowery	C	B	0	0	0	0	Pass	NA	B	A	0	0	0	0	Pass	NA	B	B	0	0	0	0	Pass	NA	0	0	0	0	0	0	Pass	NA
18	6th Avenue & Wall Street	B	B	-7	-6	0	-13	Pass	NA	B	B	-9	-6	-1	-16	Pass	NA	C	C	-2	-6	0	-8	Pass	NA	0	0	0	0	0	0	Pass	NA
19	Canal Street & 6th Avenue/Laight Street	E	D	-20	-8	-1	-29	Fail	Pass	C	C	-46	-4	-3	-53	Pass	NA	C	C	-16	-6	-1	-23	Pass	NA	0	0	0	0	0	0	Pass	NA

Table 10B-7. Queens-Midtown Tunnel – No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10%	NB	BD	NB	BD	LOS	10%	NB	BD	NB	BD	LOS	10%	NB	BD	NB	BD	LOS	10%
1	E 37th Street & 3rd Avenue	B	B	1837	1808	Pass	NA	C	C	1521	1531	Pass	NA	B	B	1790	1723	Pass	NA	C	C	1799	1861	Pass	NA
2	E 36th Street & 2nd Avenue	D	D	2437	2353	Fail	Pass	F	F	2640	2656	Fail	Pass	C	C	3036	3177	Pass	NA	C	C	2581	2980	Pass	NA
3	E 34th Street & 3rd Avenue	D	D	2071	1943	Fail	Pass	D	C	2247	2028	Pass	NA	D	C	2507	2232	Pass	NA	C	C	2410	2156	Pass	NA
4	E 35th Street & 3rd Avenue	B	B	1684	1584	Pass	NA	B	B	1734	1580	Pass	NA	B	B	1961	1733	Pass	NA	B	B	1878	1666	Pass	NA
5	E 34th Street & 2nd Avenue	D	C	2826	2768	Pass	NA	C	C	2573	2477	Pass	NA	C	D	2712	2605	Fail	Pass	C	B	2769	2591	Pass	NA
6	E 35th Street & 2nd Avenue	B	B	2205	2160	Pass	NA	B	B	1767	1707	Pass	NA	B	B	2067	1977	Pass	NA	B	B	2042	1926	Pass	NA

Table 10B-8. Queens-Midtown Tunnel – No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen		MD LOS		MD Increment			MD HDDV	MD Screen		PM LOS		PM Increment			PM HDDV	PM Screen		LN LOS		LN Increment			LN HDDV	LN Screen	
		NB	BD	MT	Bus	HT		LOS	HDDT	NB	BD	MT	Bus	HT		LOS	HDDT	NB	BD	MT	Bus	HT		LOS	HDDT	NB	BD	MT	Bus	HT		LOS	HDDT
1	E 37th Street & 3rd Avenue	B	B	-2	-1	-1	-4	Pass	NA	C	C	-2	0	0	-2	Pass	NA	B	B	-4	-2	0	-6	Pass	NA	C	C	1	-1	0	0	Pass	NA
2	E 36th Street & 2nd Avenue	D	D	-8	-7	0	-15	Fail	Pass	F	F	-2	0	0	-2	Fail	Pass	C	C	7	-2	0	5	Pass	NA	C	C	4	6	0	10	Pass	NA
3	E 34th Street & 3rd Avenue	D	D	-9	-11	0	-20	Fail	Pass	D	C	-14	-6	0	-20	Pass	NA	D	C	-9	-14	0	-23	Pass	NA	C	C	-3	-2	0	-5	Pass	NA
4	E 35th Street & 3rd Avenue	B	B	-5	-2	0	-7	Pass	NA	B	B	-8	-2	-1	-11	Pass	NA	B	B	-6	-6	0	-12	Pass	NA	B	B	-2	-2	0	-4	Pass	NA
5	E 34th Street & 2nd Avenue	D	C	-4	-3	0	-7	Pass	NA	C	C	-6	-2	0	-8	Pass	NA	C	D	-1	-6	0	-7	Fail	Pass	C	B	-1	-4	0	-5	Pass	NA
6	E 35th Street & 2nd Avenue	B	B	-3	-4	0	-7	Pass	NA	B	B	-4	-2	0	-6	Pass	NA	B	B	-2	-3	0	-5	Pass	NA	B	B	-1	-1	0	-2	Pass	NA

Table 10B-9. Red Hook Study Area – No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	Hamilton Avenue, Clinton Street & West 9 th Street	A	B	5490	5506	Pass	NA	B	B	5387	5689	Pass	NA	B	B	5372	5471	Pass	NA	A	A	3035	3290	Pass	NA
2	Hamilton Avenue NB & West 9 th Street	B	B	2324	2289	Pass	NA	B	B	2099	2129	Pass	NA	B	B	1859	1773	Pass	NA	B	B	1110	945	Pass	NA

Table 10B-10. Red Hook Study Area – No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen			MD LOS		MD Increment			MD HDDV	MD Screen			PM LOS		PM Increment			PM HDDV	PM Screen			LN LOS		LN Increment			LN HDDV	LN Screen		
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT				
1	Hamilton Avenue, Clinton Street & West 9 th Street	A	B	3	3	1	7	Pass	NA	B	B	23	2	4	29	Pass	NA	B	B	6	2	2	10	Pass	NA	A	A	12	3	2	17	Pass	NA				
2	Hamilton Avenue NB & West 9 th Street	B	B	-2	0	-1	-3	Pass	NA	B	B	2	1	1	4	Pass	NA	B	B	-5	-3	0	-8	Pass	NA	B	B	-3	-1	-1	-5	Pass	NA				

Table 10B-11. Upper West Side Study Area – No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	W 72nd Street & West End Ave	C	C	1322	1213	Pass	NA	C	C	1360	1214	Pass	NA	D	C	1754	1503	Pass	NA	C	C	1019	872	Pass	NA
2	W 61st Street & West End Ave	B	B	1200	957	Pass	NA	B	B	1088	760	Pass	NA	B	B	1667	1111	Pass	NA	B	B	958	601	Pass	NA
3a	W 79th Street & Riverside Drive	C	C	1856	1712	Pass	NA	B	B	1593	1424	Pass	NA	C	B	1996	1731	Pass	NA	B	B	1308	1129	Pass	NA
4a	W 56th Street & 12th Avenue	B	B	1482	1472	Pass	NA	B	B	903	886	Pass	NA	B	B	989	963	Pass	NA	A	A	625	580	Pass	NA
4b	W 56th Street & West Side Highway	C	C	6271	6230	Pass	NA	C	C	5284	5203	Pass	NA	B	B	5251	5157	Pass	NA	B	B	4724	4564	Pass	NA
5a	W 55th Street & West Side Highway	C	C	5332	5290	Pass	NA	D	D	5106	5025	Fail	Pass	C	C	5021	4921	Pass	NA	C	B	4419	4260	Pass	NA
5b	W 55th Street & 12th Avenue	D	D	598	583	Fail	Pass	C	C	755	729	Pass	NA	D	D	933	889	Fail	Pass	C	C	585	507	Pass	NA
5c	W 55th Street & West Side Highway Arterial	D	D	105	104	Fail	Pass	E	E	220	217	Fail	Pass	A	A	25	25	Pass	NA	A	A	10	9	Pass	NA
6	W 60th Street & Broadway	C	C	1740	1544	Pass	NA	C	C	1620	1364	Pass	NA	C	C	1878	1561	Pass	NA	C	B	1493	1148	Pass	NA
7	W 60th Street & Columbus Ave	B	B	1442	1181	Pass	NA	A	A	1507	1101	Pass	NA	A	A	1650	1077	Pass	NA	A	A	1491	850	Pass	NA
8	W 60th Street & Amsterdam Ave	C	C	1238	970	Pass	NA	C	C	1421	1065	Pass	NA	C	C	1795	1254	Pass	NA	B	B	1221	1005	Pass	NA
9	W 60th Street & West End Ave	B	B	1316	1049	Pass	NA	B	B	1294	903	Pass	NA	B	B	1801	1218	Pass	NA	B	B	1055	665	Pass	NA
10	W 61st Street & Amsterdam Ave	A	A	1114	872	Pass	NA	A	A	1230	915	Pass	NA	A	A	1599	1096	Pass	NA	A	A	1133	932	Pass	NA
11	W 61st Street & Columbus Ave	C	B	1232	968	Pass	NA	C	B	1314	904	Pass	NA	C	B	1453	867	Pass	NA	B	B	1278	665	Pass	NA
12	W 61st Street & Broadway	B	B	1506	1292	Pass	NA	B	B	1392	1112	Pass	NA	B	B	1688	1332	Pass	NA	B	B	1270	917	Pass	NA
13	W 61st Street & Columbus Ave	B	B	672	624	Pass	NA	B	B	690	615	Pass	NA	B	B	894	804	Pass	NA	B	B	732	632	Pass	NA
14	W 81st Street & Central Park West	D	C	1849	1726	Pass	NA	D	C	2061	1894	Pass	NA	D	C	2318	2118	Pass	NA	C	C	1530	1359	Pass	NA
15	W 66th Street & Central Park West	C	C	1841	1711	Pass	NA	C	C	2037	1862	Pass	NA	C	C	2162	1949	Pass	NA	C	B	1613	1365	Pass	NA
16	W 65th Street & Central Park West	D	C	2030	1910	Pass	NA	C	C	1915	1763	Pass	NA	D	D	2191	1998	Fail	Pass	C	C	1735	1569	Pass	NA

Table 10B-12. Upper West Side Study Area – No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV Total	AM Screen LOS	AM Screen HDDT	MD LOS		MD Increment			MD HDDV Total	MD Screen LOS	MD Screen HDDT	PM LOS		PM Increment			PM HDDV Total	PM Screen LOS	PM Screen HDDT	LN LOS		LN Increment			LN HDDV Total	LN Screen LOS	LN Screen HDDT
		NB	BD	MT	Bus	HT				NB	BD	MT	Bus	HT				NB	BD	MT	Bus	HT				NB	BD	MT	Bus	HT			
1	W 72nd Street & West End Ave	C	C	-4	-10	0	-14	Pass	NA	C	C	-6	-4	0	-10	Pass	NA	D	C	-4	-10	0	-14	Pass	NA	C	C	0	-5	0	-5	Pass	NA
2	W 61st Street & West End Ave	B	B	-17	-14	0	-31	Pass	NA	B	B	-22	-8	0	-30	Pass	NA	B	B	-15	-13	0	-28	Pass	NA	B	B	-3	-9	0	-12	Pass	NA
3a	W 79th Street & Riverside Drive	C	C	0	-7	0	-7	Pass	NA	B	B	0	-5	0	-5	Pass	NA	C	B	0	-7	0	-7	Pass	NA	B	B	0	-2	0	-2	Pass	NA
4a	W 56th Street & 12th Avenue	B	B	-2	0	0	-2	Pass	NA	B	B	-1	0	0	-1	Pass	NA	B	B	-1	-1	0	-2	Pass	NA	A	A	0	-3	0	-3	Pass	NA
4b	W 56th Street & West Side Highway	C	C	-2	-1	-1	-4	Pass	NA	C	C	-55	-2	-1	-58	Pass	NA	B	B	-2	-3	0	-5	Pass	NA	B	B	-1	-9	0	-10	Pass	NA
5a	W 55th Street & West Side Highway	C	C	0	0	0	0	Pass	NA	D	D	0	-1	0	-1	Fail	Pass	C	C	-1	-1	0	-2	Pass	NA	C	B	-1	0	0	-1	Pass	NA
5b	W 55th Street & 12th Avenue	D	D	0	-2	0	-2	Fail	Pass	C	C	-1	-1	0	-2	Pass	NA	D	D	-1	-1	0	-2	Fail	Pass	C	C	0	-2	0	-2	Pass	NA
5c	W 55th Street & West Side Highway Arterial	D	D	0	0	0	0	Fail	Pass	E	E	0	0	0	0	Fail	Pass	A	A	0	0	0	0	Pass	NA	A	A	0	0	0	0	Pass	NA
6	W 60th Street & Broadway	C	C	-10	-11	0	-21	Pass	NA	C	C	-15	-9	-1	-25	Pass	NA	C	C	-5	-9	0	-14	Pass	NA	C	B	-2	-8	0	-10	Pass	NA
7	W 60th Street & Columbus Ave	B	B	-28	-8	-3	-39	Pass	NA	A	A	-40	-8	-1	-49	Pass	NA	A	A	-27	-8	-2	-37	Pass	NA	A	A	-14	-6	-4	-24	Pass	NA
8	W 60th Street & Amsterdam Ave	C	C	-36	-10	-2	-48	Pass	NA	C	C	-33	-7	-5	-45	Pass	NA	C	C	-18	-8	-3	-29	Pass	NA	B	B	-4	-2	0	-6	Pass	NA
9	W 60th Street & West End Ave	B	B	-16	-16	-2	-34	Pass	NA	B	B	-25	-13	-1	-39	Pass	NA	B	B	-15	-16	0	-31	Pass	NA	B	B	-5	-10	0	-15	Pass	NA
10	W 61st Street & Amsterdam Ave	A	A	-35	-9	-3	-47	Pass	NA	A	A	-29	-6	-5	-40	Pass	NA	A	A	-17	-7	-2	-26	Pass	NA	A	A	-4	-2	0	-6	Pass	NA
11	W 61st Street & Columbus Ave	C	B	-29	-5	-4	-38	Pass	NA	C	B	-38	-8	-1	-47	Pass	NA	C	B	-25	-7	-2	-34	Pass	NA	B	B	-14	-5	-2	-21	Pass	NA
12	W 61st Street & Broadway	B	B	-13	-10	0	-23	Pass	NA	B	B	-14	-10	0	-24	Pass	NA	B	B	-7	-9	0	-16	Pass	NA	B	B	-3	-10	0	-13	Pass	NA
13	W 61st Street & Columbus Ave	B	B	-4	-1	0	-5	Pass	NA	B	B	-2	-1	0	-3	Pass	NA	B	B	-1	-1	0	-2	Pass	NA	B	B	0	-1	0	-1	Pass	NA
14	W 81st Street & Central Park West	D	C	0	-6	0	-6	Pass	NA	D	C	0	-4	0	-4	Pass	NA	D	C	0	-5	0	-5	Pass	NA	C	C	0	-2	0	-2	Pass	NA
15	W 66th Street & Central Park West	C	C	-3	-3	0	-6	Pass	NA	C	C	-3	-4	0	-7	Pass	NA	C	C	-3	-5	0	-8	Pass	NA	C	B	-2	-3	0	-5	Pass	NA
16	W 65th Street & Central Park West	D	C	-4	-4	0	-8	Pass	NA	C	C	-4	-3	0	-7	Pass	NA	D	D	-2	-4	0	-6	Fail	Pass	C	C	-1	-2	0	-3	Pass	NA

Table 10B-13. Robert F. Kennedy Bridge Study Area - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	126th Street and 2nd Avenue	C	C	2084	1995	Pass	NA	C	B	2416	2283	Pass	NA	C	C	2600	2352	Pass	NA	B	B	1310	1077	Pass	NA
2	125th Street and 2nd Avenue	C	D	2587	2604	Fail	Pass	C	C	2217	2107	Pass	NA	C	D	2988	2962	Fail	Pass	C	C	1576	1507	Pass	NA
11	E 134th Street & St. Ann's Avenue	C	C	775	775	Pass	NA	C	C	835	835	Pass	NA	C	C	665	665	Pass	NA	C	C	490	490	Pass	NA
22	St Ann's Ave and Bruckner Blvd	C	C	2415	2415	Pass	NA	D	D	2620	2620	Fail	Pass	C	C	2320	2320	Pass	NA	C	C	2265	2265	Pass	NA
17	31st St & Astoria Blvd	C	C	1243	1247	Pass	NA	B	B	901	832	Pass	NA	E	E	1199	1128	Fail	Pass	B	B	954	842	Pass	NA
24	Hoyt N & 31st St	C	C	3076	3049	Pass	NA	B	B	2383	2295	Pass	NA	B	B	2326	2187	Pass	NA	C	C	1956	1769	Pass	NA
3	Hoyt S & 31st St	C	D	1766	1805	Fail	Pass	C	C	1505	1473	Pass	NA	C	C	1860	1812	Pass	NA	C	C	1594	1582	Pass	NA

Table 10B-14. Robert F. Kennedy Bridge Study Area - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen			MD LOS		MD Increment			MD HDDV	MD Screen			PM LOS		PM Increment			PM HDDV	PM Screen			LN LOS		LN Increment			LN HDDV	LN Screen		
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT				
1	126th Street and 2nd Avenue	C	C	-9	-4	0	-13	Pass	NA	C	B	-9	-9	0	-18	Pass	NA	C	C	-5	-10	0	-15	Pass	NA	B	B	-12	-4	-1	-17	Pass	NA				
2	125th Street and 2nd Avenue	C	D	-14	-1	-2	-17	Fail	Pass	C	C	-4	-10	0	-14	Pass	NA	C	D	-8	-17	0	-25	Fail	Pass	C	C	-7	-1	-1	-9	Pass	NA				
11	E 134th Street & St. Ann's Avenue	C	C	0	0	0	0	Pass	NA	C	C	0	0	0	0	Pass	NA	C	C	0	0	0	0	Pass	NA	C	C	0	0	0	0	Pass	NA				
22	St Ann's Ave and Bruckner Blvd	C	C	0	0	0	0	Pass	NA	D	D	0	0	0	0	Fail	Pass	C	C	0	0	0	0	Pass	NA	C	C	0	0	0	0	Pass	NA				
17	31st St & Astoria Blvd	C	C	0	0	0	0	Pass	NA	B	B	0	1	0	1	Pass	NA	E	E	-3	0	0	-3	Fail	Pass	B	B	-1	1	0	0	Pass	NA				
24	Hoyt N & 31st St	C	C	0	-1	-1	-2	Pass	NA	B	B	-3	0	-1	-4	Pass	NA	B	B	-4	-2	0	-6	Pass	NA	C	C	-3	0	0	-3	Pass	NA				
3	Hoyt S & 31st St	C	D	4	0	1	5	Fail	Pass	C	C	2	0	1	3	Pass	NA	C	C	1	1	0	2	Pass	NA	C	C	1	0	1	2	Pass	NA				

Table 10B-15. Downtown Brooklyn Study Area - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	Approach	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
			NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	Flatbush Avenue and Tillary Street	Intersection	F	E	4887	4436	Fail	Pass	E	D	4505	3877	Fail	Pass	E	D	5083	4287	Fail	Pass	D	D	4383	3464	Fail	Pass
2	Adam Street and Tillary Street	Intersection	D	D	2997	2949	Fail	Pass	D	D	2874	2813	Fail	Pass	D	D	3543	3295	Fail	Pass	C	C	2109	2050	Pass	NA
3	Old Fulton Street and Vine Street	Intersection	D	D	2805	2797	Fail	Pass	D	D	2356	2306	Fail	Pass	B	B	2201	2122	Fail	Pass	C	C	2062	2049	Pass	NA

Table 10B-16. Downtown Brooklyn Study Area - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen		MD LOS		MD Increment			MD HDDV	MD Screen		PM LOS		PM Increment			PM HDDV	PM Screen		LN LOS		LN Increment			LN HDDV	LN Screen	
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT
1	Flatbush Avenue and Tillary Street	F	E	-73	-12	-6	-91	Fail	Pass	E	D	-75	-14	-2	-91	Fail	Pass	E	D	-29	-16	-2	-47	Fail	Pass	D	D	-9	-13	-2	-24	Fail	Pass
2	Adam Street and Tillary Street	D	D	-1	-2	0	-3	Fail	Pass	D	D	-3	0	0	-3	Fail	Pass	D	D	-2	0	0	-2	Fail	Pass	C	C	-2	-2	0	-4	Pass	NA
3	Old Fulton Street and Vine Street	D	D	-1	0	0	-1	Fail	Pass	D	D	-2	-1	0	-3	Fail	Pass	B	B	-1	0	0	-1	Pass	NA	C	C	-1	-1	0	-2	Pass	NA

Table 10B-17. Lincoln Tunnel Study Area - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	9th Ave and 33rd Street	B	B	1269	1221	Pass	NA	B	B	1219	1133	Pass	NA	B	B	1433	1324	Pass	NA	0	0	0	0	Pass	NA
2	Dyer Ave and 34th Street	C	C	3774	3649	Pass	NA	C	C	3642	3422	Pass	NA	C	C	4181	3912	Pass	NA	0	0	0	0	Pass	NA
3	12th Ave and 34th Street	C	C	4588	4439	Pass	NA	C	C	3819	3676	Pass	NA	C	C	5495	5204	Pass	NA	0	0	0	0	Pass	NA
4	11th Ave and 42nd Street	C	C	12866	12298	Pass	NA	C	C	11647	10729	Pass	NA	C	C	13637	12611	Pass	NA	0	0	0	0	Pass	NA
5	Dyer Ave & 36th Street	C	C	1531	1492	Pass	NA	C	C	1019	908	Pass	NA	C	C	1449	1369	Pass	NA	0	0	0	0	Pass	NA
6	10th Ave and 33rd Street	B	B	1401	1372	Pass	NA	B	B	1482	1403	Pass	NA	B	B	1937	1848	Pass	NA	0	0	0	0	Pass	NA
7	11th Ave and 34th Street	C	C	1955	1903	Pass	NA	C	C	1734	1678	Pass	NA	D	D	1320	1241	Fail	Pass	0	0	0	0	Pass	NA
8	10th Ave and 41st Street	C	C	2411	2296	Pass	NA	C	C	2913	2581	Pass	NA	C	C	2188	1817	Pass	NA	0	0	0	0	Pass	NA
9	12th Ave and 42nd Street	D	D	5394	5232	Fail	Pass	D	D	4831	4650	Fail	Pass	C	C	5824	5527	Pass	NA	0	0	0	0	Pass	NA

Table 10B-18. Lincoln Tunnel Study Area - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen		MD LOS		MD Increment			MD HDDV	MD Screen		PM LOS		PM Increment			PM HDDV	PM Screen		LN LOS		LN Increment			LN HDDV	LN Screen		
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	
1	9th Ave and 33rd Street	B	B	-5	-3	0	-8	Pass	NA	B	B	-6	-2	0	-8	Pass	NA	B	B	-4	-2	0	-6	Pass	NA	0	0	0	0	0	0	0	Pass	NA
2	Dyer Ave and 34th Street	C	C	-2	-2	0	-4	Pass	NA	C	C	-3	-3	0	-6	Pass	NA	C	C	-1	-2	0	-3	Pass	NA	0	0	0	0	0	0	0	Pass	NA
3	12th Ave and 34th Street	C	C	-6	-5	0	-11	Pass	NA	C	C	-2	-4	0	-6	Pass	NA	C	C	-5	-6	0	-11	Pass	NA	0	0	0	0	0	0	0	Pass	NA
4	11th Ave and 42nd Street	C	C	-6	-7	-1	-14	Pass	NA	C	C	-19	-10	-2	-31	Pass	NA	C	C	-11	-9	-1	-21	Pass	NA	0	0	0	0	0	0	0	Pass	NA
5	Dyer Ave & 36th Street	C	C	-4	-1	0	-5	Pass	NA	C	C	-9	-1	-1	-11	Pass	NA	C	C	-2	0	0	-2	Pass	NA	0	0	0	0	0	0	0	Pass	NA
6	10th Ave and 33rd Street	B	B	-4	0	0	-4	Pass	NA	B	B	-22	-1	-1	-24	Pass	NA	B	B	-5	-2	0	-7	Pass	NA	0	0	0	0	0	0	0	Pass	NA
7	11th Ave and 34th Street	C	C	-3	-2	0	-5	Pass	NA	C	C	-8	-2	0	-10	Pass	NA	D	D	-5	-6	0	-11	Fail	Pass	0	0	0	0	0	0	0	Pass	NA
8	10th Ave and 41st Street	C	C	-13	-27	-1	-41	Pass	NA	C	C	-37	-31	-2	-70	Pass	NA	C	C	-53	-49	-4	-106	Pass	NA	0	0	0	0	0	0	0	Pass	NA
9	12th Ave and 42nd Street	D	D	-1	-4	0	-5	Fail	Pass	D	D	-2	-3	0	-5	Fail	Pass	C	C	-4	-5	0	-9	Pass	NA	0	0	0	0	0	0	0	Pass	NA

Table 10B-19. New Jersey Study Area - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	14th Street / Holland Tunnel (E-W) & Marin Boulevard (N-S)	E	D	3181	2888	Fail	Pass	D	D	3052	2574	Fail	Pass	E	E	2962	2944	Fail	Pass	0	0	0	0	Pass	NA
4	14th Street (E-W) & Jersey Avenue (N-S)	D	D	4689	4396	Fail	Pass	C	C	3738	3260	Pass	NA	E	E	5664	5646	Fail	Pass	0	0	0	0	Pass	NA
5	12th Street (E-W) & Jersey Avenue (N-S)	F	E	3772	3694	Fail	Pass	D	D	2687	2586	Fail	Pass	E	E	3749	3609	Fail	Pass	0	0	0	0	Pass	NA
8	12th Street/Holland Tunnel (E-W) & Marin Boulevard (N-S)	E	D	3085	3007	Fail	Pass	C	C	2577	2476	Pass	NA	C	C	3576	3436	Pass	NA	0	0	0	0	Pass	NA

Table 10B-20. New Jersey Study Area - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen		MD LOS		MD Increment			MD HDDV	MD Screen		PM LOS		PM Increment			PM Screen		LN LOS		LN Increment			LN Screen	
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	LOS	HDDT	NB	BD	MT	Bus	HT	LOS	HDDT
1	14th Street / Holland Tunnel (E-W) & Marin Boulevard (N-S)	E	D	-15	-7	0	-22	Fail	Pass	D	D	-56	-3	-3	-62	Fail	Pass	E	E	0	0	0	Fail	Pass	0	0	0	0	0	Pass	NA
4	14th Street (E-W) & Jersey Avenue (N-S)	D	D	-10	-7	0	-17	Fail	Pass	C	C	-45	-2	-3	-50	Pass	NA	E	E	0	0	0	Fail	Pass	0	0	0	0	0	Pass	NA
5	12th Street (E-W) & Jersey Avenue (N-S)	F	E	-5	-3	0	-8	Fail	Pass	D	D	-3	-1	0	-4	Fail	Pass	E	E	-2	-3	0	Fail	Pass	0	0	0	0	0	Pass	NA
8	12th Street/Holland Tunnel (E-W) & Marin Boulevard (N-S)	E	D	-6	-2	0	-8	Fail	Pass	C	C	-5	0	0	-5	Pass	NA	C	C	-2	-2	0	Pass	NA	0	0	0	0	0	Pass	NA

Table 10B-21. West Side Highway/Route 9A Study Area - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen		
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	HDDT
1	24th Street & 12th Ave	C	C	4133	4005	Pass	NA	C	C	3484	3350	Pass	NA	C	C	4976	4711	Pass	NA	C	C	3235	2966	Pass	NA	NA

Table 10B-22. West Side Highway/Route 9A Study Area - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment		AM HDDV	AM Screen			MD LOS		MD Increment		MD HDDV	MD Screen			PM LOS		PM Increment		PM HDDV	PM Screen			LN LOS		LN Increment		LN HDDV	LN Screen		
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT
1	24th Street & 12th Ave	C	C	-5	-3	0	-8	Pass	NA	C	C	-4	-4	0	-8	Pass	NA	C	C	-5	-3	0	-8	Pass	NA	C	C	-4	-3	-2	-9	Pass	NA

Table 10B-23. Little Dominican Republic Area - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen		
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	HDDT
1	W 179th St & Broadway	C	C	813	823	Pass	Pass	C	C	1081	1142	Pass	Pass	C	C	1117	1144	Pass	Pass	0	0	0	0	Pass	Pass	

Table 10B-24. Little Dominican Republic Area - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen			MD LOS		MD Increment			MD HDDV	MD Screen			PM LOS		PM Increment			PM HDDV	PM Screen			LN LOS		LN Increment			LN HDDV	LN Screen		
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT				
1	W 179th St & Broadway	C	C	1	5	0	6	Pass	NA	C	C	0	0	0	0	Pass	NA	C	C	0	0	0	0	Pass	NA			0	0	0	0	Pass	NA				

Table 10B-25. Lower Eastside - No-Action Alternative vs. CBD Tolling Alternative Carbon Monoxide Screening

Intersection #	Intersection Name	AM LOS		AM Volume		AM Screen		MD LOS		MD Volume		MD Screen		PM LOS		PM Volume		PM Screen		LN LOS		LN Volume		LN Screen	
		NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume	NB	BD	NB	BD	LOS	10% Volume
1	Park Row/Chatham Square & Worth/Oliver St & Mott St	C	C	1076	1026	Pass	Pass	D	C	1050	798	Pass	Pass	D	C	1146	900	Pass	Pass	0	0	0	0	Pass	Pass
2	Chatham Square & E Broadway	C	C	791	741	Pass	Pass	C	D	885	633	Fail	Pass	D	D	1026	780	Fail	Pass	0	0	0	0	Pass	Pass
3	Chatham Square/Bowery & Division St	B	B	816	766	Pass	Pass	B	B	845	593	Pass	Pass	B	C	1096	850	Pass	Pass	0	0	0	0	Pass	Pass

Table 10B-26. Lower Eastside - No-Action Alternative vs. CBD Tolling Alternative Particulate Matter Screening

Intersection #	Intersection Name	AM LOS		AM Increment			AM HDDV	AM Screen		MD LOS		MD Increment			MD HDDV	MD Screen		PM LOS		PM Increment			PM HDDV	PM Screen		LN LOS		LN Increment			LN HDDV	LN Screen	
		NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT	NB	BD	MT	Bus	HT	Total	LOS	HDDT
1	Park Row/Chatham Square & Worth/Oliver St & Mott St	C	C	-5	-2	0	-7	Pass	NA	D	C	-22	-10	0	-32	Pass	NA	D	C	-19	-8	0	-27	Pass	NA	0	0	0	0	0	0	Pass	NA
2	Chatham Square & E Broadway	C	C	-6	-3	0	-9	Pass	NA	C	D	-28	-12	0	-40	Fail	Pass	D	D	-27	-12	0	-39	Fail	Pass	0	0	0	0	0	0	Pass	NA
3	Chatham Square/Bowery & Division St	B	B	-2	-1	0	-3	Pass	NA	B	B	-6	-4	0	-10	Pass	NA	B	C	-9	-5	0	-14	Pass	NA	0	0	0	0	0	0	Pass	NA

Highway Link Analyses

- Since all intersections passed the screenings, and per agreement of the 2019 ICG, no detailed hotspot analysis were required.
- In response to concerns raised during community meetings, the team decided to analyze the effects of the link-level highway segments on localized communities – particularly on the Cross Bronx Expressway in the vicinity of Macombs Road and on the FDR Drive near 10th Street.
- Due to the changes in truck volumes at Macombs Road, a highway link PM microscale analysis was conducted to determine air quality effects of the project.
- As the FDR does not allow trucks, a PM analysis was not conducted. A CO screening at that location passed NYSDOT TEM's Volume Threshold Analysis.

Table 1: Cross Bronx Expressway Volumes at Macombs Road

Time Period	# Hours	No Action	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F
Cross Bronx Expressway Volumes at Macombs Road								
AM	4	39,205	39,975	40,003	39,613	39,757	40,235	39,703
MD	6	54,071	54,596	54,522	54,277	54,666	54,659	54,689
PM	4	44,092	44,297	44,046	44,332	44,213	44,063	44,438
NT	10	49,711	52,111	52,503	50,913	50,209	51,879	50,436
Total	24	187,079	190,980	191,075	189,135	188,845	190,836	189,267
Cross Bronx Expressway Truck Volumes at Macombs Road								
AM	4	7,003	7,045	7,063	6,926	7,089	7,029	7,156
MD	6	9,924	9,896	9,986	9,893	9,851	9,896	9,845
PM	4	3,923	3,927	3,988	3,936	4,057	3,977	3,937
NT	10	6,742	7,231	7,259	7,007	7,105	7,068	7,189
Total	24	27,592	28,100	28,296	27,762	28,102	27,970	28,128
Cross Bronx Expressway Truck Percentages at Macombs Road								
AM	4	18%	18%	18%	17%	18%	17%	18%
MD	6	18%	18%	18%	18%	18%	18%	18%
PM	4	9%	9%	9%	9%	9%	9%	9%
NT	10	14%	14%	14%	14%	14%	14%	14%
Total	24	14.7%	14.7%	14.8%	14.7%	14.9%	14.7%	14.9%
Cross Bronx Expressway Truck Volume Changes at Macombs Road								
AM	4	-	42	60	-77	85	-25	153
MD	6	-	-28	63	-31	-73	-27	-78
PM	4	-	5	65	13	134	54	15
NT	10	-	489	517	265	363	326	447
Total	24	-	509	704	170	510	378	536

Source: WSP



- **Minority:** a person who is Black or African American (not Hispanic), American Indian and Alaskan Native, Asian American, Native Hawaiian or other Pacific Islander, and Hispanic or Latino.
- **Minority population:** Any readily identifiable groups of minority persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons, who will be similarly affected by a proposed FHWA program, policy, or activity.

This analysis also includes people who identified themselves as “some other race” or “two or more races” in the U.S. Census Bureau 2015–2019 ACS 5-Year Estimates.

17A.5.2 Minority Populations in Local (Neighborhood) Study Area

Census tracts were considered to be minority if either: (1) at least 50 percent of the census tract’s population identifies as minority; or (2) the percentage of population identifying as minority in the census block group exceeds the share of minority population in the county where that census tract is located.

17A.5.3 Minority Populations in Regional Study Area

The environmental justice analysis considers the Project’s potential for effects on minority-population commuters, travelers, or individuals in specific industries, businesses, or other groups that could be affected by increased cost associated with accessing the Manhattan CBD. To identify minority populations among these groups, the Project Sponsors used worker flow information from the CTPP.

Data is available in the CTPP regarding mode of travel by racial/ethnic group, and this data was used to identify overall travel patterns for minority people who work in the Manhattan CBD. However, the CTPP does not have data on minority commuters’ travel modes that also identifies the locations from which they travel. For this information, the Project Sponsors estimated the general locations from which minority commuters drive to the Manhattan CBD using a several-step process. For each census tract, information is available regarding travel modes for people who travel to work in Manhattan. The analysis assumed that the travel modes for all workers traveling to Manhattan from the tract also apply to the minority population in those tracts who are traveling to Manhattan for work. Using that assumption, the Project Sponsors estimated the number of minority people who commute to work in the Manhattan CBD by travel mode from each tract.

This methodology used data sets available in the CTPP in the first four steps before estimating in the final, fifth step:

1. Identify all census tracts in the 28-county region that are origins for minority people who work in the Manhattan CBD: the result is 4,311 census tracts.
2. For all tracts identified in step 1, identify all tracts that are origins for workers who drive to work in the Manhattan CBD: the result is 3,427 census tracts.

3. For all tracts identified in step 2, identify tracts that do not have any minority workers who drive to work, regardless of destination. The result is 25 tracts, which are then subtracted from those identified in step 2, leaving 3,402 census tracts with minority people who work in the Manhattan CBD and potentially could drive.
4. For the tracts identified in Step 3, identify tracts where all workers who commute to the Manhattan CBD drive. There are 31 such tracts, with 470 minority workers. Therefore those 470 minority workers drive to the Manhattan CBD. Similarly, identify tracts where all workers are minority or all drivers are minority. The result of this step is 8,764 minority auto commuters in 345 tracts.
5. For the remaining 3,060 census tracts, identify the percent of all workers who commute by car to the Manhattan CBD and identify the number of minority people who commute to the Manhattan CBD from the tract. Apply the auto share percentage to the minority workers, assuming that the same percentage of minority workers drives as the percentage of overall workers.

Table 17A-1 provides a summary of the results using this approach.

Table 17A-1. Estimating Minority Workers Who Drive to the Manhattan CBD

STEP	SOURCE	RESULT
1. Census tracts that are the origin for minority people who work in the Manhattan CBD	CTPP data on worker flows between census tracts, by race	Total minority workers in the Manhattan CBD Identification of all census tracts as origins
2. Census tracts that are origins for all workers who drive to the Manhattan CBD	CTPP data on worker flows between census tracts, by mode	Identification of specific census tracts from which people drive to work to the Manhattan CBD
3. Census tracts where no minority workers drive to work	CTPP data on worker origins and mode to work, by race (no destinations)	Identification of specific census tracts from which no minority workers can drive to work in the Manhattan CBD
4. Census tracts where all workers commute to the Manhattan CBD by driving, all workers are minority, or all drivers are minority.	CTPP data on worker flows, by race and/or by mode	Total minority commuters to the Manhattan CBD who drive from specific identified census tracts
5. For remaining census tracts, apply overall worker mode share to the Manhattan CBD to minority people who work in the Manhattan CBD.	CTPP data on worker flows by mode applied to CTPP data on worker flows by race	Estimated number of minority workers who drive to the Manhattan CBD from remaining tracts
RESULTING TOTAL:		Estimated total of minority workers who drive to the Manhattan CBD and from which specific census tracts

17A.6 METHODOLOGY FOR IDENTIFYING LOW-INCOME POPULATIONS

17A.6.1 Definitions

USDOT Order 5610.2C and FHWA Order 6640.23A include the following definitions related to minority populations:

- **Low-Income:** A person whose household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines.
- **Low-Income Population:** Any readily identifiable groups of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons who will be similarly affected by a proposed FHWA program, policy, or activity.

The U.S. Census Bureau identifies households and household income. According to the U.S. Census Bureau, a household “includes all the persons who occupy a housing unit as their usual place of residence.”⁸

The analysis for this Project used information on the number of households living in poverty from the U.S. Census Bureau 2015–2019 ACS 5-Year Estimates. The HHS poverty guidelines are based on annual statistical poverty thresholds from the U.S. Census Bureau.⁹ The U.S. Census Bureau poverty thresholds are used to identify the population living in poverty for statistical purposes, while the HHS poverty guidelines are used to determine eligibility for Federal programs. Poverty thresholds vary by family size and composition, while poverty guidelines vary by household size and geographic location and both are updated annually.¹⁰

The environmental justice analysis used information from the U.S. Census Bureau’s 2015-2019 ACS 5-Year Estimates to identify low-income census tracts in the study area. Information on the population with household incomes below the poverty thresholds as defined by the U.S. Census Bureau is available at a local (census tract) level, whereas information on the HHS poverty guideline is not. However, as the HHS poverty guidelines are based on the Census Bureau threshold, the latter is commonly used as a proxy for the former.

Based on a review of potential methodologies and consideration of a number of critical factors, the Project Sponsors in consultation with FHWA identified income thresholds to be used in identifying low-income populations that are appropriate for identifying low-income populations in the Project study area and reflect local conditions and cost of living in the study area.

⁸ <https://www.census.gov/quickfacts/fact/note/US/HSD410219>.

⁹ <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

¹⁰ This approach is recommended in the Federal Interagency Working Group on Environmental Justice & NEPA Committee’s *Promising Practices for Environmental Justice Methodologies in NEPA Reviews* (2016).

17A.6.2 Low-Income Populations in Local (Neighborhood) Study Area

17A.6.2.1 Approach

The Project Sponsors identified census tracts with low-income populations using a low-income threshold of twice the Federal poverty threshold. (More specifically, the Project Sponsors used data from the U.S. Census on the number of individuals in each census tract with household incomes up to 1.99 times the Federal poverty threshold. For simplicity, this analysis refers to that information as twice the Federal poverty threshold.) This income level was used to identify low-income census tracts as follows:

1. The percentage of individuals with household incomes up to twice the Federal poverty threshold in each census tract was identified and compared to that percentage for a larger reference area. Census tracts with a higher percentage of population with household incomes at or below twice the Federal poverty threshold were considered low-income.
2. The reference area for comparison was the regional 28-county study area.

The rationale for those two steps is described below.

17A.6.2.2 Rationale for Low-Income Threshold for Census Tracts

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), directs Federal agencies to identify and address, as appropriate, disproportionately high and adverse effects of Federal actions on minority and low-income populations. That document does not define “low-income.” While the USDOT Order 5610.2C and FHWA Order 6640.23A define low-income populations as people living below the HHS poverty guideline, the 2011 FHWA guidance document notes that Project Sponsors may adopt a more inclusive threshold for low-income as long as it is inclusive of all persons at or below the Federal poverty guidelines.¹¹ The Project Sponsors used a threshold for identifying populations living in poverty that is specific to the Project context, recognizing that the level of income that constitutes poverty is higher in the New York metropolitan region than it is nationwide, given the higher cost of many items, and particularly housing, in the New York City area.

In identifying the low-income threshold of twice the Federal poverty threshold, the Project Sponsors considered the following factors, to ensure that the approach reflects the local context for the Project and employs an appropriate methodological approach:

- The threshold used for identifying low-income census tracts should relate to the Federal poverty threshold, rather than to a specific household income level. The Federal poverty threshold incorporates consideration of household size and composition, which is important in identifying a household’s economic strength.

¹¹ The U.S. Census Bureau has established poverty thresholds to identify the population living in poverty, which are updated each year. These can be used to identify the population living in poverty in a specific location, such as a census tract. The HHS poverty guidelines are a simplified version of those Federal poverty thresholds that are used for administrative purposes—for instance, determining financial eligibility for certain Federal programs. <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

*Interim Report to the Traffic Congestion Mitigation Commission***Executive Summary****The Purpose of the Traffic Congestion Mitigation Commission**

High levels of traffic congestion in New York City's central business district (CBD) have an adverse impact on the economy, environment, quality of life, and public health of the City and region. If the population of New York City continues to grow as is projected, congestion will worsen without action to expand transit service and to manage the transportation network more efficiently. In April 2007, New York City Mayor Michael R. Bloomberg proposed piloting a congestion pricing system in the most congested areas of Manhattan as a means of reducing traffic and raising funds for the transit system. Under the proposal, drivers would be charged a fee between 6 a.m. and 6 p.m. to enter, exit, or travel within Manhattan south of 86th Street. The revenue generated by congestion pricing would be used to bring the regional transit system up to a state of good repair and to fund system expansion projects. The congestion pricing plan ("the Mayor's plan") was part of PlaNYC, the Mayor's overall sustainability strategy for the City.

In recognition of the growing congestion problem in Manhattan and in response to the Mayor's plan, the State Legislature passed legislation in July, 2007, which was signed by Governor Eliot Spitzer, creating the 17-member Traffic Congestion Mitigation

Commission ("the Commission"). The mandate of the Commission is to study

and evaluate approaches to reducing congestion in the most congested areas of Manhattan, including the Mayor's plan, and to recommend a comprehensive traffic congestion mitigation plan to the City and the State by January 31, 2008. The Commission is required to set forth an implementation plan that achieves at least a 6.3 percent reduction in vehicle miles traveled (VMT) in Manhattan south of 86th Street—the estimated level of VMT reduction of the Mayor's plan.¹ The Commission members were appointed by public officials from across the City and State, as shown above.

As part of the Mayor's plan, the City and State sought to leverage additional federal funding designated by the U.S. Department of Transportation (USDOT) for states and local governments pursuing pricing-based congestion reduction strategies. In August 2007, the City, along with the Metropolitan Transportation Authority (MTA) and New York State Department of Transportation (NYSDOT), signed an Urban Partnership Agreement (UPA) with USDOT. Under this agreement, the City and State are eligible to receive \$354 million in federal funding for transit and transportation system improvements if the City and State approve a pricing-based traffic mitigation plan by March 31, 2008. The federal funds would be used to improve transit services prior to the implementation of congestion pricing. The Commission may recommend any approach that achieves a 6.3 percent VMT reduction in Manhattan south of 86th Street, but a plan

Commission Appointing Authorities

- Governor: 3 Commissioners
- Assembly Speaker: 3 Commissioners
- Assembly Minority Leader: 1 Commissioner
- Senate President: 3 Commissioners
- Senate Minority Leader: 1 Commissioner
- New York City Council Speaker: 3 Commissioners
- New York City Mayor: 3 Commissioners

¹ Analysis conducted in the spring of 2007 indicated a 6.3 percent VMT reduction for the Mayor's plan. As discussed on page 20, updates to the model used for the analysis were completed in the fall of 2007. With these updates, the projected VMT reduction for the Mayor's plan is 6.7 percent.

Interim Report to the Traffic Congestion Mitigation Commission

that does not use pricing as its primary congestion mitigation mechanism will render the City and State ineligible for the UPA funds.

In its research efforts, the Commission is being supported by an interagency working group of transportation professionals, including planning staff from the Mayor's Office of Long-Term Planning and Sustainability, the MTA, New York City Department of Transportation (NYCDOT), NYSDOT, and the Port Authority of New York and New Jersey (PANYNJ). All work products presented to the Commission by agency staff have been reviewed by the interagency working group.

Commission Process and Work to Date

Over the last four months, the Commission has gone through a comprehensive process of consulting with the public, evaluating a wide range of alternative approaches to traffic mitigation, and weighing the advantages and disadvantages of those approaches. Specifically, the Commission:

- reviewed transportation and transit enhancement plans prepared by the MTA and NYSDOT (these plans outline improvements that would be necessary for implementation of the Mayor's plan);
- held a series of public hearings across the City and region to solicit the input of the public on the issue of traffic congestion, possible remedies, and the impacts of the Mayor's plan;
- developed a list of evaluation criteria by which to evaluate different traffic congestion mitigation options, including indicators on traffic, transit funding, the environment, the economy, and neighborhood quality of life; and
- devised a research agenda examining alternatives, complements, and modifications to the Mayors' plan and reviewed analyses on those topics as prepared by agency staff.

MTA and NYSDOT Improvement Plans

The Commission began by reviewing the MTA and NYSDOT transit and transportation enhancement plans necessary for the implementation of the Mayor's congestion pricing plan. To accommodate the substantial increase in transit ridership expected as a result of the Mayor's plan, the City and the MTA would implement a series of short-term mass transit improvements, especially within the congestion zone and in areas of the city that

MTA Transit Enhancement Plan	Costs
Capital Cost	\$767 million
Annual Operating Cost	\$104 million
Annual Debt Service	\$56 million

lack convenient transit access to Manhattan. These improvements would include: new and expanded express bus service, more frequent bus and subway service on key lines, dedicated bus lanes on bridges, bus rapid transit (BRT), and new ferry service. Sufficient service

improvements would be in place prior to the implementation of the Mayor's plan to absorb the projected increase in transit demand. New funding would be needed for both the operating and capital costs associated with the MTA's plan.

Interim Report to the Traffic Congestion Mitigation Commission

In addition, NYSDOT evaluated the impact of the Mayor's plan on the regional highway system and on transit services not provided by the MTA. NYSDOT found that the traffic impacts on the arterial system in general would likely be positive or neutral,

NYSDOT Enhancement Plan	Costs
Capital Cost	\$59.5 million
Annual Operating Cost	\$0.5 million

but it also saw the need for additional monitoring on key highway segments and interchanges to gauge the impacts of congestion pricing. The Mayor's plan may also have a small impact on suburban transit services that are not

provided by the MTA. Based on this analysis, NYSDOT proposed, among other improvements, an enhanced traffic monitoring system, regional data collection and information sharing, additional suburban park-and-ride locations, and improved traveler information. New funding would be needed for both the operating and capital costs associated with NYSDOT's plan.

Public Hearings and Commission Evaluation Criteria

As part of its statutory mandate to provide the opportunity for the public to participate and comment, the Commission conducted a series of public hearings in each borough of the City of New York (Manhattan, Queens, the Bronx, Brooklyn, and Staten Island), in Long Island, and in Westchester County. The Commission heard testimony from State and local elected officials, transportation and environmental groups, community organizations, and private citizens.

Witnesses provided their views on congestion in the City and the region, and the impact of congestion and various mitigation options on the economy, the environment, quality of life, public health, and the transportation network. Some raised equity, fairness, privacy, and/or feasibility issues with the Mayor's plan, while others indicated their support for the Mayor's plan, stating it would reduce congestion and provide funding for transit. Regardless of their position on congestion pricing, most speakers urged stronger action to counter worsening traffic congestion in and beyond the CBD and to improve the regional transit system.

Following the public hearings, the Commission discussed how it would evaluate alternative traffic congestion mitigation proposals. The legislation establishing the Commission requires that the Commission undertake a thorough review and study of plans to reduce traffic congestion, and that the Commission's recommended plan achieve at least a 6.3% reduction in VMT. Given these guidelines, as well as concerns raised by the public, elected officials, and various stakeholder groups, the Chairman recommended a set of evaluation criteria to guide discussion at the October 25 meeting. The Commission's evaluation criteria are as follows:

- 1) **Best practices (implemented elsewhere):** the degree to which the program is based on mitigation policies that have successfully been implemented in other cities.
- 2) **Reduction of Vehicle Miles Traveled:** estimate of VMT reduction in Manhattan south of 86th Street.
- 3) **Improvements in local and regional air quality and environment:** estimate of emissions reductions and other environmental impacts.

Interim Report to the Traffic Congestion Mitigation Commission

- 4) **Net revenues raised for mass transit:** estimate of net annual revenues raised to fund the transit system.
- 5) **Impacts on neighborhoods**
 - a. **Traffic congestion outside of the central business district:** estimate of traffic impacts on areas of the City outside the CBD.
 - b. **Parking:** the degree to which the program is likely to decrease the availability of on-street parking in neighborhoods adjacent to the CBD.
- 6) **Impact on economic classes:** the degree to which the program is progressive or regressive in the allocation of costs and benefits across economic classes.
- 7) **Regional equity:** the degree to which the program equitably allocates costs and benefits across geographic areas within the New York metropolitan region.
- 8) **Privacy:** the degree to which the program creates concerns over personal privacy rights.
- 9) **Implementability:** the feasibility of implementing the program given available technology, the program's design, and start-up and operating costs.
- 10) **Economic impact on jobs, business and the regional economy:** The impact of the program on the City and regional economy.

Research Agenda

Having set forth its evaluation criteria, the Commission turned its attention to developing a list of alternative congestion mitigation proposals for review and discussion. The Commission took a comprehensive approach to setting its research agenda, choosing to examine a wide array of potential approaches. Based on input from the Commission members, elected officials, the public, and stakeholder groups, the Chairman drafted a research agenda and presented it to the Commission. This agenda, presented in the box to the right, included an evaluation of policies that are alternatives to the Mayor's plan (such as mandatory carpooling), policies that could be alternatives or supplements to the Mayor's plan (such as higher parking meter rates), and modifications to the Mayor's plan (such as moving the northern boundary of the congestion pricing zone from 86th to 60th Street). Each of the options was evaluated using the ten criteria developed by the commission. The results of the research agenda revealed that several different approaches to congestion mitigation, including congestion pricing, bridge tolling, license plate rationing, and taxi and parking

Commission Research Agenda**Options reviewed:**

- Regulate and restrict truck movement
- Telecommuting incentives
- Increase cost of parking in CBD
- Reduce use of government parking placards
- Additional taxi stands to reduce cruising
- Raise cab fares and fees charged to cabs
- Raise tolls or variable tolls on existing facilities
- License plate rationing
- Required carpooling
- Creation of High-Occupancy Toll lanes
- Congestion pricing with a 60th St. northern boundary
- Congestion pricing with no intra-zonal charge
- Congestion pricing with a charge on FDR & West St.
- Congestion pricing with variable charges or extended hours
- Congestion pricing with a hybrid exemption
- Congestion charging with a modified toll offset policy
- Tolling alternatives

Interim Report to the Traffic Congestion Mitigation Commission

policies, rate well on a number of the Commission's evaluation criteria and were worthy of further review. (A full summary of the research agenda is presented in Chapter 4 of the Interim Report).

Options for Evaluation

Based on the feedback from the public hearings, the results of the research agenda, and discussion among the Commission members, the Chairman directed agency staff to develop a set of five options for further review by the Commission. These included the Mayor's plan and four alternatives, each focusing on one of the following approaches: congestion pricing, bridge tolling, pricing of parking and taxis, and license plate rationing. The Chairman directed agency staff to estimate the VMT reduction of each option, and to then evaluate all options that meet the mandate of a 6.3 percent reduction in VMT along each of the evaluation criteria established by the Commission. For its final recommendation, the Commission may select one of the alternatives presented in this report, or may choose to modify one of the alternatives, combine elements of two or more alternatives, or put forward a wholly different plan. A summary of the five options, along with the comparative strengths and weaknesses of each, is presented below:

The Mayor's Plan

Description	Parameter	Mayor's Plan
Passenger vehicles entering or leaving Manhattan below 86th Street during the business day (weekdays 6 am to 6 pm) would pay an \$8 daily fee. Trucks would pay \$21. Certain low-emission trucks would pay \$7. For trips within the congestion pricing zone, cars would pay \$4 and trucks would pay \$5.50. Emergency vehicles, transit vehicles, vehicles with handicapped license plates, taxis, and for-hire vehicles (radio cars) would be exempt. Vehicles using E-ZPass that travel through MTA or Port Authority (PA) tolled crossings on the same day would pay only the difference (if any) between their MTA or PA tolls and the congestion charge. Roads on the periphery of Manhattan will not be in the zone.	<i>Northern Boundary</i>	86 St
	<i>Intra-zonal Charge</i>	Yes (\$4)
	<i>Through Trips</i>	Free if using peripheral routes
	<i>Direction of Charge</i>	2-Way
	<i>Flat or Variable</i>	Flat \$8
	<i>12 Hour or 24 Hour</i>	12 hour
	<i>E-ZPass Toll Offset</i>	Yes
	<i>LPR Surcharge</i>	None
	<i>Fee or Toll</i>	Daily Fee

Strengths

- The Mayor's plan is projected to reduce VMT by 6.7% and to generate \$420 million a year in revenues for transit investment.²
- The Mayor's plan would reduce traffic across the city, especially in neighborhoods adjacent to the congestion pricing zone, including Upper Manhattan, Long Island City, and Downtown Brooklyn.
- Nearly all low and moderate income commuters take transit to the Manhattan CBD. These workers would benefit from the Mayor's plan through short-term improvements in transit services and long-term expansion of the transit system.

² As the Port Authority's proposed toll increase has not yet been approved, the revenue estimates for the Mayor's plan and the alternative congestion pricing plan were based on current Port Authority toll rates. The Port Authority's proposed toll increase would reduce congestion pricing revenues of the Mayor's plan by approximately \$50 million a year. This estimate would vary based on the extent to which drivers switch from cash payment to E-ZPass.

Interim Report to the Traffic Congestion Mitigation Commission

- The intra-zonal charge discourages trips within the congestion pricing zone with the same pricing approach as for all other trips into or out of the zone.
- The 86th Street boundary includes a larger portion of the most congested area of Manhattan.
- The plan's free periphery route allows drivers to travel around the CBD without paying the fee. For example, Brooklyn and Queens drivers could travel to the Bronx or Upper Manhattan via the FDR Drive without paying the fee.
- The plan does not raise significant regional equity concerns.

Weaknesses

- Compared to the other four plans, the Mayor's plan has significantly higher capital costs. The Mayor's plan includes a charge on trips within the zone and thus requires many more charging stations, each with an array of E-ZPass and license plate recognition (LPR) cameras.
- Similarly, the Mayor's plan has significantly higher operating costs. The charge on trips within the zone and the free periphery route significantly increase the number of transactions that must be processed for each paying customer.
- Unlike the alternative congestion pricing and toll plans, described below, the Mayor's plan does not include a charge on taxi and livery trips into or out of the zone—a major source of traffic and vehicle emissions in the CBD.
- The Mayor's plan includes the placement of hundreds of cameras within and around the zone's perimeter, compared to only 25 or 13 camera sites needed for the alternate congestion pricing and toll plan respectively. More cameras raise greater privacy concerns.
- As under the alternative congestion pricing and toll plans, park-and-ride activity could increase in neighborhoods near the zone or adjacent to major transit hubs if measures are not taken by the City to manage parking. Similarly, the plan could potentially create localized congestion impacts due to changes in traffic patterns in the region.
- A small proportion of low and moderate income workers—those who drive to the CBD and who do not have a feasible transit alternative—would be disproportionately impacted by the congestion fee as compared to higher income drivers.

The Alternative Congestion Pricing Plan

Description	Parameter	Alt C.P. Plan
The alternative congestion pricing plan is a modified approach to congestion pricing that eliminates the intra-zonal charge and free periphery, charges inbound trips only, and moves the northern boundary of the charging zone to 60 th Street. Cars would be charged an \$8 fee to drive into the zone on weekdays between 6am and 6pm. Trucks would pay \$21, except for low-emission trucks, which would pay \$7. Under this fee-based plan, drivers would pay once upon entering the charging zone and would be able to make additional trips in and out of the zone at no additional cost. For E-ZPass users, the value of all tolls paid on MTA or Port Authority bridges and tunnels would be deducted from the fee up to \$8. In addition, the plan includes three taxi and parking measures, described at right.	<i>Northern Boundary</i>	60 St
	<i>Intra-zonal Charge</i>	None
	<i>Through Trips</i>	Charged
	<i>Direction of Charge</i>	Inbound
	<i>Flat or Variable</i>	Flat \$8 fee
	<i>12 Hour or 24 Hour</i>	12 hour
	<i>E-ZPass Toll Offset</i>	Yes
	<i>LPR Surcharge</i>	\$1
	<i>Fee or Toll</i>	Daily Fee
	\$1 taxi/livery trip surcharge for trips that start and/or end in zone	
	Increase metered parking rates within zone	
	Eliminate resident parking tax exemption within zone	

Strengths

- The alternative congestion pricing plan is projected to reduce VMT by 6.8% and to generate \$520 million a year in revenues for transit investment.
- The alternative congestion pricing plan has significantly lower capital and operating costs than the Mayor's plan and is comparable in those categories to the toll plan.
- Similar to the other plans, the alternative congestion pricing plan would reduce traffic across

Interim Report to the Traffic Congestion Mitigation Commission

the city especially in neighborhoods adjacent to the congestion pricing zone, including Upper Manhattan, Long Island City, and Downtown Brooklyn.

- Similar to the Mayor's plan and toll plan, the alternative congestion pricing plan would benefit low and moderate income residents through improved transit.
- The alternative pricing plan would further encourage Manhattan residents to use transit by increasing the cost of parking within the CBD and by adding a \$1 surcharge on taxi trips that end or begin within the zone.
- Compared to the Mayor's plan, the alternative congestion pricing plan is easier to implement.
- The plan does not raise significant regional equity concerns.

Weaknesses

- Unlike the Mayor's plan, there is no free peripheral route and drivers would have to pay to travel through the CBD. For example, Brooklyn and Queens drivers that travel to the Bronx or Upper Manhattan via the FDR Drive would pay the congestion fee.
- The elimination of the intra-zonal charge would leave no per-day charge on private auto use within the zone for drivers not using metered parking at their destination. However, the smaller zone minimizes the impact of this problem.
- As under the alternative congestion pricing and toll plans, park-and-ride activity could increase in neighborhoods near the zone or adjacent to major transit hubs if measures are not taken by the City to manage parking. Similarly, the plan could potentially create localized congestion impacts due to changes in traffic patterns in the region.
- A small proportion of low and moderate income workers—those who drive to the CBD and who do not have a feasible transit alternative—would be disproportionately impacted by the congestion fee as compared to higher income drivers.

The East River and Harlem River Toll Plan

Description	Parameter	Toll Plan
All un-tolled East River and Harlem River crossings would be subject to inbound and outbound tolls. These tolls would be in effect 24 hours a day, seven days a week, and would match the toll rates on the MTA's East River crossings. ³ The Henry Hudson Bridge toll was assumed to be increased to \$4 to match the rates on the other crossings. Following the MTA toll structure, trucks would pay higher tolls depending on their size. Similar to the Mayor's plan, tolls would be collected electronically; there would be no toll plazas or physical barriers. Cars would be charged a \$4 per-trip toll 24 hours a day to enter or leave Manhattan by any East or Harlem River crossing. The Port Authority toll structure would remain the same.	<i>Tolled Crossings</i>	East and Harlem River bridges
	<i>Direction of Toll</i>	2-way
	<i>Flat or Variable</i>	Flat \$4 toll
	<i>12 Hour or 24 Hour</i>	24 hour
	<i>LPR Surcharge</i>	\$1
	<i>Fee or Toll</i>	Per-trip Toll

Strengths

- The toll plan is projected to reduce VMT by 7% and to generate \$859 million a year in new revenues for mass transit—the most of any of the alternatives considered.
- The toll plan would enable the City, the MTA, and Port Authority to move toward a more uniform tolling strategy for Manhattan, including the potential implementation of one-way tolling and/or time-of-day pricing on all crossings into Manhattan.
- The toll plan has significantly lower capital and operating costs than the Mayor's plan, and slightly lower operating costs than the alternative congestion pricing plan. One-way tolling on all crossings would further reduce operating costs for both the MTA and the City. The plan also

³ Tolls would apply to: the Brooklyn Bridge, Manhattan Bridge, Williamsburg Bridge, Queensboro Bridge, Willis Avenue Bridge, Third Avenue Bridge, Madison Avenue Bridge, 145th Street Bridge, Macombs Dam Bridge, Alexander Hamilton Bridge (Cross Bronx Expressway), Washington Bridge, University Heights (207 St.) Bridge, Broadway Bridge and Henry Hudson Bridge (increase from current toll).

Interim Report to the Traffic Congestion Mitigation Commission

<p>includes fewer cameras than the Mayor's plan.</p> <ul style="list-style-type: none"> • The toll plan would eliminate the need to match transactions to calculate a daily charge and would enable uniform charges to cash and E-ZPass customers. • Similar to the Mayor's plan and the alternative congestion pricing plan, the toll plan would benefit low and moderate income residents through improved transit. • Similar to the other plans, the toll plan would reduce traffic across the city. It would have a greater impact on traffic in the Bronx, especially on through truck traffic. • Compared to the two congestion pricing plans, the toll plan would significantly impact local trips between the South Bronx and Harlem/Washington Heights. This shift would reduce vehicle emissions in these neighborhoods.
<p>Weaknesses</p> <ul style="list-style-type: none"> • Tolls would apply to all trips into and out of Manhattan and would be in effect 24 hours a day, seven days a week. By charging at all hours, the toll plan does not distinguish between drivers who contribute to peak period congestion and drivers who travel at less congested times. • Unlike the Mayor's plan and the alternative congestion pricing plan, the toll plan does not address trips that start and end within Manhattan. Under the alternative congestion pricing plan, for example, many of these trips would be charged at 60th Street or would be captured by the \$1 taxi surcharge within the zone. • Compared to the two congestion pricing plans, the toll plan would significantly impact local trips between the South Bronx and Harlem/Washington Heights. This shift could have a local adverse economic impact. • Per-trip tolls would have a greater impact on commercial vehicles than the two congestion pricing plans. A commercial vehicle making multiple trips in and out of Manhattan would pay for each trip under the toll plan, rather than a flat daily fee under either the Mayor's plan or the alternative congestion pricing plan. • The toll plan would institute a toll on the Cross Bronx Expressway/I-95 corridor, causing potential diversions to other regional routes and tolled facilities. This would require further evaluation. • The plan has disproportional impacts on motorists from the Bronx. • As under the alternative congestion pricing and toll plans, park-and-ride activity could increase in neighborhoods near the zone or adjacent to major transit hubs if measures are not taken by the City to manage parking. Similarly, the plan could potentially create localized congestion impacts due to changes in traffic patterns in the region. • A small proportion of low and moderate income workers—those who drive to the CBD and who do not have a feasible transit alternative—would be disproportionately impacted by the toll as compared to higher income drivers.

The License Plate Rationing Plan

Description	Parameter	Rationing Plan
License plate rationing restricts a set of vehicles from entering a specified area on certain days based on the last digit of the vehicle's license plate. Under this scenario, the City would ban a particular vehicle once every five days, e.g., restricting 20 percent of all vehicles each weekday from 6 am-6 pm. The rationing restriction would apply to the area of Manhattan south of 86 th Street. Emergency vehicles, transit vehicles, and vehicles with handicapped license plates would be exempt. Enforcement could be conducted using a system of license plate cameras similar to the Mayor's plan or by posting police officers at each of the entry points into the rationing zone.	<i>Vehicles Restricted Daily</i>	20%
	<i>Northern Boundary</i>	86 th Street
	<i>12 Hour or 24 Hour</i>	12 hour
Strengths		
<ul style="list-style-type: none"> • The rationing plan is projected to reduce VMT by 10.3 percent, assuming that the system 		

Interim Report to the Traffic Congestion Mitigation Commission

<p>coordinates plate numbers for multi-car households.</p> <ul style="list-style-type: none"> • Similar to the other plans, the rationing plan would reduce traffic across the city, especially in neighborhoods adjacent to the congestion pricing zone, including Upper Manhattan, Long Island City, and Downtown Brooklyn. • The plan would require either the installation of LPR cameras around the rationing zone, with similar capital cost to the alternative pricing plan, or a dedicated staff of police officers to manually enforce the restriction. • The plan would not have a disproportionate impact on low and moderate income commuters; all drivers would be equally impacted. Some income equity issues could emerge if two-car households are able to circumvent the restriction. • The plan raises no regional equity concerns.
<p>Weaknesses</p> <ul style="list-style-type: none"> • The plan does not generate revenue and would need to be coupled with a broad-based tax measure to fund transit investments. • The rationing plan provides less flexibility to businesses. Under the congestion pricing and toll plans, businesses and employees would always have the ability to make auto trips into Manhattan or the CBD, albeit for a price. Under rationing however, businesses would lack that flexibility. • The rationing plan reduces revenue to the Port Authority and MTA. • As under all four plans, park-and-ride activity could increase in neighborhoods near the zone or adjacent to major transit hubs if measures are not taken by the City to manage parking. Similarly, as with all four plans, the plan could potentially create localized congestion impacts due to changes in traffic patterns in the region.

The Combination Plan

Description	Parameter	Combination Plan
This plan includes a series of measures to significantly increase the cost of on-street and off-street parking in Manhattan south of 60 th Street, including raising the City parking tax for garages within the CBD, eliminating the resident parking tax exemption within the zone, increasing meter rates within the zone, and charging a \$2 overnight parking fee for all on-street spaces within the zone. In addition, the plan calls for reducing by 10,000 the number of government parking placards used to commute to jobs in the zone (these placards allow government employees to park in restricted spaces or without charge in metered spaces). In order to reduce taxi traffic, the plan also includes an \$8 surcharge on all taxi trips within, into, or out of the area of Manhattan south of 86 th Street.	Increase parking tax from 18.375% to 38.375% in CBD	
	Eliminate resident parking tax exemption in CBD	
	Increase meter rates in CBD	
	Reduce by 10,000 number of government parking placards used to commute to CBD jobs	
	\$2 overnight parking fee in CBD	
	\$8 surcharge for taxi trips with start and /or end south of 86 Street.	
<ul style="list-style-type: none"> • The combination is projected to reduce VMT by 3.2 percent, and thus does not meet the Commission's legislatively mandated criteria and is not evaluated in terms of strengths and weaknesses by the commission 		

Next Steps

Following the release of this report on January 10, the Commission will hold a public hearing on January 16 to solicit input from the public on the five proposed alternatives. Based on this feedback and further deliberations, the Commission will vote on a final traffic congestion mitigation plan at its January 31, 2008 meeting and forward its recommendation to the Governor, State Legislature, City Council, and Mayor for review.

Interim Report to the Traffic Congestion Mitigation Commission

The commission is free to recommend a modified version of any of the plans presented above or to select a wholly different plan.

**New York State Vehicle and Traffic Law, as amended,
Title 8, Respective Powers of State and Local Authorities
Article 44-c, Central Business District Tolling Program (§§ 1701 – 1706)**

§ 1701. Legislative findings and declaration.

The ongoing failures of the tracks, signals, switches, electrical power, and other transportation infrastructure throughout the subway system in the city of New York continue to have a significant deleterious impact on the health, safety, and livelihood of commuters, tourists, resident New Yorkers, as well as business and commerce in the metropolitan commuter transportation district, which is the recognized economic engine of the state of New York, and thereby have adversely affected the economy of the state of New York. Temporary actions have been taken to address the safety of subway, bus and commuter rail riders in the short term including an emergency declaration and increased capital funding for the subways in the most recently adopted state budget. The legislature, however, determines that a long-term and sustainable solution is necessary in order to ensure stable and reliable funding to repair and revitalize this significantly important mass transit asset.

The legislature further finds and declares that traffic congestion in the city of New York ranks second worst among cities in the United States and third worst among cities in the world, and results in significant cost to the New York metropolitan area economy and in turn the state's economy at estimates exceeding one hundred billion dollars over the next five years. Travel speeds in the city of New York's central business district have dropped more than seventeen percent in two thousand sixteen to an average of 6.8 miles per hour and in Midtown Manhattan, the most congested area of the city-the area from fifty-ninth street to thirty-fifth street and from ninth avenue to the east river-the average vehicular speed is 4.7 miles per hour. Congestion in these areas is crippling and impacts the everyday lives of residents, commuters, taxi and for-hire vehicle traffic, bus transit and emergency services, and is a significant contributor to decreased air quality.

These issues have been recognized by both the Fix NYC Advisory Panel and the Metropolitan Transportation Sustainability Advisory Workgroup as significant impediments to everyday New Yorkers.

In order to ensure a safe and efficient mass transit system within the city of New York and to protect the public health and safety of New York's residents, a program to establish tolls for vehicles entering or remaining in the most congested area of the state is found to be necessary and to be a matter of substantial state concern.

§ 1702. Short title.

This act shall be known as and may be cited as "the traffic mobility act".

§ 1703. Definitions.

For the purposes of this article, unless the context otherwise requires:

§ 1704. Establishment of central business district tolling program.

1. The Triborough bridge and tunnel authority shall establish the central business district tolling program.
2. The central business district tolling program will operate in the central business district. The central business district shall include the geographic area in the borough of Manhattan south of and inclusive of sixtieth street to the extent practicable but shall not include the FDR Drive, and New York state route 9A otherwise known as the "West Side highway" including the Battery Park underpass and any surface roadway portion of the Hugh L. Carey Tunnel connecting to West St. The boundaries of the central business district shall not be modified, expanded, or reduced and shall incorporate the outer bounds of the aforementioned district to the extent practicable.
 - 2-a. The Triborough bridge and tunnel authority shall enter into a memorandum of understanding with the city department of transportation for purposes of coordinating the planning, design, installation, construction and maintenance of the central business district tolling infrastructure including required signage. The Memorandum shall address the use of existing systems, devices and other facilities owned and operated by the city for the purposes of a central business district tolling program, as well as reimbursable costs associated with the planning, design, installation, construction and maintenance of such program. Such memorandum of understanding shall be entered into no later than sixty days from the effective date of this article.
3. (a) Notwithstanding any law to the contrary, the Triborough bridge and tunnel authority, pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the city department of transportation shall plan, design, install, construct, and maintain the central business district tolling infrastructure. The city of New York shall cooperate and consult with the Triborough bridge and tunnel authority to facilitate the planning, design, construction, timely implementation, and maintenance of the central business district tolling infrastructure and shall not unduly hinder or delay the planning, designing, installation, operation, construction, timely implementation, or maintenance of the same. Notwithstanding any provision of law to the contrary, the city of New York shall, pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the Triborough bridge and tunnel authority, be authorized to provide for the use of existing systems, devices and other facilities owned and operated by the city, including, but not limited to systems and devices installed pursuant to sections one thousand one hundred eleven-a, one thousand one hundred eleven-c, and one thousand one hundred eighty-b of this chapter to facilitate the Triborough bridge and tunnel authority's central business district tolling program and shall work with the Triborough bridge and tunnel authority to facilitate the same.
 - (b) The Triborough bridge and tunnel authority shall, pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the city department of transportation, plan, design, install, construct, and maintain a central business district toll collection system and implement and operate the same to collect the central business district toll.

§ 1704-a. Central business district toll.

1. Consistent with the goals of reducing traffic congestion within the central business district and funding capital projects the Triborough bridge and tunnel authority shall have the power, subject to agreements with its bondholders, and applicable federal law to establish and charge variable tolls and fees for vehicles entering or remaining in the central business district at any time and shall have the power, subject to agreements with bondholders, and applicable federal law to make rules and regulations for the establishment and collection of central business district tolls, fees, and other charges. For purposes of establishing a central business district toll or tolls the board shall, at minimum, ensure annual revenues and fees collected under such program, less costs of operation of the same, provide for sufficient revenues into the central business district tolling capital lockbox fund, established pursuant to section five hundred fifty-three-j of the public authorities law necessary to fund fifteen billion dollars for capital projects for the 2020 to 2024 MTA capital program, and any additional revenues above that amount to be available for any successor programs. Additionally, no toll may be established and charged on passenger vehicles registered pursuant to subdivision six of section four hundred one of this chapter more than once per day for purposes of entering the central business district.

2. No qualifying authorized emergency vehicle as defined pursuant to section one hundred one of this chapter or a qualifying vehicle transporting a person with disabilities shall be charged a central business district toll if it enters or remains in the central business district. Application for such toll exemption shall be made in such manner as prescribed by the Triborough bridge and tunnel authority and shall contain such information as the authority may reasonably require.

3. (a) The Triborough bridge and tunnel authority shall implement a plan for credits, discounts and/or exemptions for tolls paid on bridges and crossings informed by the recommendations of the traffic mobility review board.

(b) The Triborough bridge and tunnel authority shall be authorized to provide additional credits, discounts and exemptions informed by the recommendations of the traffic mobility review board and a traffic study that considers impact.

4. The Triborough bridge and tunnel authority shall implement a plan to address credits, discounts, and/or exemptions for for-hire vehicles as defined by, and subject to a surcharge imposed by, article twenty-nine-C of the tax law for a for-hire transportation trip, informed by the recommendation of the traffic mobility review board.

§ 1705. Disposition of revenue and penalties.

The Triborough bridge and tunnel authority shall establish and collect central business district tolls, fees and other charges as provided in subdivision twelve-a of section five hundred fifty-three of the public authorities law.

New York State Public Authorities Law, as amended
Article 3: Bridge and Tunnel Authorities
Title 3: Triborough Bridge Authority

§ 553-k. Traffic mobility review board

1. The authority's board shall establish the "traffic mobility review" board (board), which shall consist of a chair and five members, that shall be made up of regional representation, one of whom shall be recommended by the mayor of the city of New York, one of whom shall reside in the Metro North Region, and one of whom shall reside in the Long Island Rail Road Region. Members of the board must have experience in at least one of the following areas: public finance; transportation; mass transit; or management. The chair and the members of the board shall be appointed by the authority.

2. The board shall make a recommendation regarding the central business district toll amounts to be established pursuant to article forty-four-C of the vehicle and traffic law, which shall include a variable-pricing structure, no sooner than November fifteenth, two thousand twenty and no later than December thirty-first, two thousand twenty, or no later than thirty days before a central business district tolling program is initiated, whichever is later. Such recommendation shall be submitted to the board of the Triborough bridge and tunnel authority for consideration before the Triborough bridge and tunnel authority board may approve central business district toll amounts that may be established and adopted.

3. For purposes of recommending a central business district toll or tolls in addition to the goal of reducing traffic within the central business district, the board shall, at minimum, ensure that annual revenues and fees collected under such program, less costs of such program, provide for revenues into the central business district tolling capital lockbox fund, established pursuant to section five hundred fifty-three-j of this chapter, necessary to fund fifteen billion dollars for capital projects for the 2020 to 2024 capital program, and any additional revenues above that amount to be available for any successor program. The board shall consider for purposes of its recommendations, factors including but not limited to, traffic patterns, traffic mitigation measures, operating costs, public impact, public safety, hardships, vehicle type, discounts for motorcycles, peak and off-peak rates and environmental impacts, including but not limited to air quality and emissions trends. The board shall recommend a plan for credits, discounts, and/or exemptions for tolls paid on bridges and crossings which shall be informed by a traffic study associated with the impact of any such credits, discounts and/or exemptions on the recommended toll. The board shall recommend a plan for credits, discounts, and/or exemptions for for-hire vehicles defined, and subject to a surcharge imposed by, article twenty-nine-C of the tax law for a for-hire transportation trip based on factors including, but not limited to, initial market entry costs associated with licensing and regulation, comparative contribution to congestion in the central business district, and general industry impact. The board shall produce a detailed report that provides information regarding the board's review and analysis for purposes of establishing its recommendations, including but not limited to, all of the considerations referred to in this subdivision. The board shall not recommend a toll that provides for charging passenger vehicles registered pursuant to subdivision six of section four hundred one of the vehicle and traffic law more than once per day.

CENTRAL BUSINESS DISTRICT (CBD) TOLLING PROGRAM

*[Appendix 18A, Responses to
Frequently Received Comments]*

2023

Contents

Appendix 18A	Responses to Frequently Received Comments	18A-1
Comment 1:	What is the purpose of the CBD Tolling Program and why is it needed?	18A-1
Comment 2:	Are there other alternatives to reduce congestion, such as eliminating bike lanes, eliminating outdoor dining, enforcing parking regulations, and requiring trucks to make deliveries during off-peak periods?	18A-3
Comment 3:	Are there other methods for generating funds for future transportation improvements?	18A-7
Comment 4:	How will the revenue from this Project be spent and how will the public know the funds are being used appropriately?	18A-10
Comment 5:	Why does MTA need additional revenue when it already receives regular funding from other sources? MTA's budgeting and expenditures should be subject to oversight to ensure money is spent appropriately.	18A-11
Comment 6:	Why does MTA need additional revenue when it received billions of dollars in COVID-relief funding?	18A-13
Comment 7:	Why is the CBD Tolling Program still being progressed, given that we are still recovering from the COVID-19 pandemic?	18A-14
Comment 8:	Why does the EA rely on 2019 data, which does not reflect post-COVID conditions?	18A-14
Comment 9:	Why was the Best Practice Model (BPM) used for the analyses in this EA and are the results, which demonstrate congestion reduction and revenue generation, reliable?	18A-15
Comment 10:	Why did FHWA and the Project Sponsors prepare an Environmental Assessment for the Project?	18A-19
Comment 11:	Can the 30-day public comment period be extended?	18A-21
Comment 12:	What public outreach was conducted during the NEPA process?	18A-21
Comment 13:	Please clarify the boundaries of the area where the CBD toll would apply, and which roads would and would not be excluded?	18A-23
Comment 14:	What does "remaining in" the Manhattan CBD mean?	18A-23
Comment 15:	What is the process for selecting the actual tolling structure?	18A-24
Comment 16:	How were the toll amounts determined, will they vary, and are they final?	18A-26
Comment 17:	Does the Program include incentives for trucks to make deliveries during off-peak and overnight periods or to discourage trucks from diverting to avoid the Manhattan CBD?	18A-28
Comment 18:	Will there be any exemptions, discounts, or crossing credits?	18A-30
Comment 19:	How will the exemption for vehicles transporting persons with disabilities work?	18A-37
Comment 20:	Will my car be subject to the toll on days when it is parked in a garage or on the street in the Manhattan CBD?	18A-39
Comment 21:	I drive infrequently or for short distances when I enter or leave the Manhattan CBD. I do not contribute to congestion, so why should I pay the new toll?	18A-39
Comment 22:	Why should I pay an extra toll to enter the Manhattan CBD when I already pay a toll at a bridge or tunnel?	18A-39
Comment 23:	How will this Project be fair for drivers who cannot reasonably use public transportation, and therefore won't have a reasonable alternative to paying the new toll?	18A-40
Comment 24:	Is MTA improving its transit system before implementing the CBD Tolling Program?	18A-42
Comment 25:	What is MTA doing to improve safety in its system?	18A-45
Comment 26:	Can the region's public transportation system accommodate increased ridership caused by this Project?	18A-47
Comment 27:	How will this Project affect middle-income drivers?	18A-52
Comment 28:	Will the CBD Tolling Program cause residents to relocate outside of the Manhattan CBD or the region?	18A-53

Central Business District (CBD) Tolling Program Environmental Assessment

Appendix 18A: Responses to Frequently Received Comments

Comment 29:	What are the potential effects of the Project to elderly populations?	18A-54
Comment 30:	Why should patients from regional locations and other locations in New York City have to pay to enter the Manhattan CBD for medical appointments?	18A-54
Comment 31:	How will the CBD Tolling Program affect businesses and the economy?	18A-56
Comment 32:	How will the CBD Tolling Program affect the cost of goods and services?	18A-60
Comment 33:	How will the Project affect traffic outside the Manhattan CBD?	18A-62
Comment 34:	How will the Project affect parking?	18A-65
Comment 35:	How will traffic changes and diversions due to the Project affect air quality?	18A-67
Comment 36:	How will the Project affect minority and low-income populations?	18A-73
Comment 37:	How will the Project Sponsors mitigate the economic effect to low-income residents?	18A-75
Comment 38:	How will the Project affect taxi and FHV drivers?	18A-79
Comment 39:	What mitigation and enhancement measures will the Project Sponsors implement, in addition to those that were described in the EA?	18A-79

Tables

Table 18A-1:	Evaluation Results for the CBD Tolling Alternative	18A-16
Table 18A-2:	Tolling Scenarios Evaluated in the Environmental Assessment: Toll Rates Considered	18A-29
Table 18A-3:	Projected Percentage of Total Revenue/Percentage of Total Trips	18A-31
Table 18A-4:	Regional and Place-Based Mitigation Measures	18A-82

Figures

Figure 18A-1:	Trends in Subway Crime and NYPD Enforcement, Pre-COVID vs. Post-COVID	18A-46
Figure 18A-2:	Comparison of Transit Ridership, Pre-COVID vs. Post-COVID	18A-49
Figure 18A-3:	Comparison of Long Island Rail Road Ridership, Pre-COVID vs. Post-COVID	18A-50
Figure 18A-4:	Comparison of Metro-North Railroad Ridership, Pre-COVID vs. Post-COVID	18A-50
Figure 18A-5:	Environmental Justice Census Tracts with High Pre-Existing Pollutant and Chronic Disease Burdens Where Truck Traffic Proximity Could Potentially Increase (Tolling Scenario E)	18A-71

Acronyms

ADA	Americans with Disabilities Act
BPM	Best Practice Model
BRP	Budget Reduction Program
CBD	Central Business District
CEQR	City Environmental Quality Review

CTPP.....	Census Transportation Planning Package
EA.....	Environmental Assessment
EIS.....	Environmental Impact Statement
EJSWG.....	Environmental Justice Stakeholder Working Group
EJTAG.....	Environmental Justice Technical Advisory Group
FDR Drive.....	Franklin D. Roosevelt Drive
FHV.....	For-Hire Vehicles
FHWA.....	Federal Highway Administration
FTA.....	Federal Transit Administration
HOT.....	high-occupancy toll
LCC.....	London Congestion Charge
MPO.....	Metropolitan Planning Organizations
MTA.....	Metropolitan Transportation Authority
NAAQS.....	National Ambient Air Quality Standards
NEMT.....	Non-Emergency Medical Transportation
NEPA.....	National Environmental Policy Act
NJTPA.....	North Jersey Transportation Planning Authority
NYCDOT.....	New York City Department of Education
NYCT.....	New York City Transit
NYMTC.....	New York Metropolitan Transportation Council
NYPD.....	New York City Police Department
NYSDTF.....	New York State Department of Taxation and Finance
NYSDEC.....	New York State Department of Environmental Conservation
ODEP.....	Organizational Disability E-ZPass Plan
PANYNJ.....	Port Authority of New York and New Jersey
PATH.....	Port Authority Trans-Hudson
PCA.....	Personal Care Attendants
ROD.....	Record of Decision
RTP.....	Regional Transportation Plans
SAPA.....	State Administrative Procedure Act
SBS.....	Select Bus Service
SBWG.....	Small Business Working Group
SIP.....	State Implementation Plan
SNAP.....	Supplemental Nutrition Assistance Program
TBTA.....	Triborough Bridge and Tunnel Authority
TIP.....	Transportation Improvement Program
TLC.....	Taxi and Limousine Commission
TMRB.....	Traffic Mobility Review Board
USEPA.....	U.S. Environmental Protection Agency
VMT.....	Vehicle-Miles Traveled
VPPP.....	Value Pricing Pilot Program

Appendix 18A Responses to Frequently Received Comments

This appendix contains responses to 39 of the most frequent comments made during the public comment period. These should be used when reading **Appendix 18C, “Comments and Responses”** and **Appendix 18D, “Form Letter Submissions”** as they reference the responses in this document.

Comment 1: What is the purpose of the CBD Tolling Program and why is it needed?

The purpose of the Central Business District (CBD) Tolling Program (the Project) is to reduce traffic congestion in the Manhattan CBD in a manner that would generate revenue for future transportation improvements, pursuant to acceptance into Federal Highway Administration’s (FHWA) Value Pricing Pilot Program (VPPP).

Congestion has been a long-standing issue in the Manhattan CBD. Despite numerous initiatives to address this problem, in 2019 New York City ranked as the second worst among United States cities in terms of congestion and in 2020 and 2021, New York City’s traffic congestion ranked worst, with last-mile speeds in the Manhattan CBD of only 12 miles per hour (mph).^{1, 2} Low travel speeds and unreliable travel times to, from, and within the Manhattan CBD increase auto commute times, erode worker productivity, reduce bus and paratransit service quality, raise the cost of deliveries and the overall cost of doing business, and delay emergency vehicles. A 2018 analysis by Partnership for New York City, an organization that represents the city’s business leadership and largest private-sector employers, predicted that congestion in the New York City region would cost businesses, commuters, and residents \$100 billion over the next 5 years.

This congestion jeopardizes the economic vitality of New York City and the greater New York metropolitan region. The metropolitan region is the largest in the United States, with 22.2 million people and more than 10.7 million jobs. Within this region, New York City is the economic hub, with roughly 4.6 million (43 percent) of the region’s jobs and 8.4 million (38 percent) of the region’s population. According to the U.S. Bureau of Economic Analysis, the New York metropolitan region accounted for approximately 9 percent of the nation’s Gross Domestic Product in 2020.

Reducing vehicle congestion in the Manhattan CBD would benefit all drivers traveling to and near the Manhattan CBD, with travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety for vehicles, pedestrians, and bicyclists, and improved air quality in the Manhattan CBD and regionwide. These congestion-reduction benefits would also result in economic benefits related to increased productivity. In addition, reductions in vehicle volumes and vehicle-miles traveled (VMT) in the Manhattan CBD and other locations within the regional study area would benefit those who continue to drive in the Manhattan CBD, including delivery vehicles and taxi and for-hire vehicle (FHV) drivers. With less

¹ INRIX 2020 Global Traffic Scorecard. <https://inrix.com/press-releases/2020-traffic-scorecard-us/>.

² INRIX 2021 Global Traffic Scorecard. <https://inrix.com/scorecard-city/?city=New%20York%20City%20NY&index=5>.

Appendix 18A: Responses to Frequently Received Comments

congestion and improved speeds, drivers can reach their customers more quickly and transport them to their destinations more quickly. Reduced congestion would also facilitate the more efficient and cost-effective distribution of goods and services by truck in the Manhattan CBD. Transit riders who use buses, including minority and low-income passengers, would benefit from the Project through congestion reduction that would result in travel-time savings, improved travel-time reliability, and improved safety.

Reduced regional air pollution would provide an important benefit to all residents of the region, particularly for environmental justice populations who experience adverse health effects related to air pollution, such as asthma. Environmental justice populations who live in the Manhattan CBD would experience lower localized pollutant emissions due to reduced traffic. See responses to **Comment 35** and **Comment 39** for further information on the analysis of local effects and related mitigation.

New York City Department of Transportation (NYCDOT), Metropolitan Transportation Authority (MTA), and other transportation agencies have implemented programs to increase mobility and improve accessibility in the Manhattan CBD by nonvehicular modes and to reduce vehicular congestion. Private companies have collaborated with NYCDOT to establish car-share, scooter-share, and bicycle-share programs. NYCDOT has repurposed curbside parking to establish bicycle lanes and to increase pedestrian space with sidewalk and corner bump outs. It has also converted curbside lanes and general-purpose traffic lanes to dedicated bus lanes on certain Manhattan avenues and east-west, crosstown streets. Additionally, MTA and other transit agencies offer reduced transit fares for the elderly, disabled, and school-age children, and in early 2022, MTA implemented fare capping as part of its new fare system roll out (OMNY), which allows free, unlimited rides to customers the rest of the week once they have spent \$33 (the same as taking 12 trips). Many employers participate in a Federal program that allows employees a tax-free deduction for money used to purchase transit fares, and many companies have adopted flexible work schedules, including options to work remotely. In fact, the New York City Commuter Benefits Law mandates that companies in New York City with 20 or more full-time employees must offer such pre-tax transit benefits to their employees. Despite these various initiatives to reduce vehicular traffic in the Manhattan CBD, and despite the existence in this region of the three largest commuter railroads in the United States, the largest bus system, and the largest subway system (the latter two of which operate 24 hours a day, 7 days a week, every day of the year), congestion persists.

In addition, the Project would establish a reliable, recurring local source of funding for MTA capital projects, which would allow MTA to reinvest in and improve its transportation network. As a way to further reduce congestion, the modernization of MTA's commuter rail, subway, and bus network is necessary to create a faster, more accessible, and more reliable transportation network for the New York City region's residents, commuters, and visitors. Transit is the primary mode of travel to the Manhattan CBD and the continued investment in transit is critical to mobility and accessibility of the Manhattan CBD and the region. However, existing funding sources are insufficient to pay for the transit improvement and modernization projects identified in the MTA 2020–2024 Capital Program and subsequent capital programs that are needed for subway, bus, and commuter rail services. See the response to **Comment 3** for more information on why other actions, such as raising transit fares, raising tolls, and pursuing fare-beaters and toll evaders are inadequate to meet the need for funding for the MTA Capital Program.

For more information on the purpose and need for the CBD Tolling Program, see the Environmental Assessment (EA), Chapter 1, “Introduction.”

Comment 2: Are there other alternatives to reduce congestion, such as eliminating bike lanes, eliminating outdoor dining, enforcing parking regulations, and requiring trucks to make deliveries during off-peak periods?

Congestion has been a long-standing issue in the Manhattan CBD and the City of New York has implemented strategies to address it. These measures address congestion at certain locations or contribute to the overall strategy to reduce congestion in the Manhattan CBD, but vehicle volumes continue to increase, and additional measures are needed to further reduce congestion. Commenters suggested a range of different options they believe would reduce congestion without introduction of a new toll, including eliminating bike lanes, eliminating outdoor dining in curbside roadway space, enforcing parking regulations to eliminate double parking, requiring trucks to make deliveries during off-peak periods, reducing the number of taxis and FHV's permitted in the Manhattan CBD, implementing license plate “rationing,” eliminating traffic signals, increasing speed limits, and building connector roads that bypass the city, among others.

A variety of congestion management options have been evaluated over many decades. These strategies have proven difficult, insufficient, or not viable to implement. Moreover, many of the suggested strategies would not meet the purpose and need of the CBD Tolling Program, which is to reduce traffic congestion in the Manhattan CBD in a manner that would generate revenue for future transportation improvements, pursuant to acceptance into FHWA's VPPP. Individual efforts such as changes to and increased enforcement of existing parking regulations would not provide sufficient congestion reduction, nor would they provide a stable source of funding for MTA's Capital Program, and therefore, they would not meet the purpose of the Project. Further, many of the suggestions made by commenters—such as increasing posted speed limits, removing bus lanes, removing bike lanes, and removing space for outdoor dining—would reverse public policy initiatives with a range of public purposes, including improving bus speeds, encouraging travel by public transit and modes other than vehicles (which can reduce congestion), increasing safety for traffic and pedestrians, and supporting economic recovery following the pandemic.

For more information on congestion reduction strategies previously considered, see the EA, Chapter 1, “Introduction” (Section 1.4.1); Chapter 2, “Alternatives;” and Appendix 2A, “Previous Studies and Concepts Considered.” Additional discussion on some of the proposals made by commenters is provided below.

ELIMINATING BIKE LANES

The City of New York has a goal of accelerating the growth of safe cycling by providing a system of bicycle routes that traverse and connect all five boroughs, while also creating a dense, fine-grained network of bike lanes in communities where cycling is already a popular mode of transportation.³ That goal is part of a public policy called the “Green Wave Plan.” According to NYCDOT, the Green Wave Plan “presents a long-term citywide vision for improving cycling safety and the riding experience for cyclists. This is a

³ <https://www.nyc.gov/html/dot/html/bicyclists/bikestats.shtml>.

comprehensive, multi-agency approach to curtail bike fatalities and injuries. As cycling continues to grow dramatically, the plan combines design, enforcement, legislation, policy and education to make the City's streets safer for cyclists – and all street users.” According to the latest Green Wave Progress Report from April 2021 (<https://www1.nyc.gov/html/dot/downloads/pdf/green-wave-progress-report-2021.pdf>), the City plans to build 30 miles of protected bike lanes annually, among other goals to improve cycling safety, reduce emissions, improve transportation infrastructure equity, and reduce traffic congestion by encouraging a mode shift to 10 percent cycling trips by 2050.

Consequently, eliminating bike lanes would be counter to established public policy. Moreover, eliminating bike lanes would not serve the needs of the increasing number of people who travel in New York City by bicycle rather than by vehicle, which is counter to the goal of reducing traffic congestion.

ELIMINATING OUTDOOR DINING

Due to the success of the emergency Open Restaurants program during COVID-19, the City of New York is currently working to create a permanent Open Restaurants program.⁴ This program will be managed by the City of New York and allow restaurants to use the sidewalk adjacent to and curbside roadway space in front of their businesses for outdoor dining. As part of the transition from a temporary to a permanent program, NYCDOT and the New York City Department of City Planning prepared an evaluation of a proposed permanent program's potential environmental effects, in accordance with the requirements of the New York City Environmental Quality Review (CEQR).⁵ The environmental review concluded that the Open Restaurants program would not result in adverse effects on traffic flows in the city, since all in-street seating would be within parking lanes and not reduce the traffic capacity of streets. Consequently, eliminating outdoor dining would be counter to an established policy and would not reduce congestion in the Manhattan CBD.

PARKING REGULATION ENFORCEMENT

The City of New York conducts extensive enforcement of its on-street parking regulations, including within the Manhattan CBD, and issues 9 to 11 million parking tickets each year. With the CBD Tolling Program, this enforcement would continue and the reduced traffic volumes in the Manhattan CBD would also reduce the demand for on-street parking, which would free up more legal parking spaces to meet the demand and thus could reduce the frequency of double parking.

As it relates specifically to parking placards issued to government employees, prior studies have shown this would reduce VMT south of 86th Street by 0.1 to 0.3 percent, depending on the size of the reduction (reductions evaluated ranged from 3,000 to 10,000 placards). With this level of VMT reductions, this alternative would not reduce the number of vehicles entering the Manhattan CBD enough to meet the Project objective of reducing VMT in the Manhattan CBD by at least 5 percent. The City of New York continues to work with the relevant city, state, and Federal agencies to address the policies, regulations and

⁴ <https://www.nyc.gov/html/dot/html/pedestrians/openrestaurants.shtml>.

⁵ <https://a002-ceqraccess.nyc.gov/ceqr/Details?data=MjFET1QwMTZ2O&signature=df7d36b6ae9c6b9fc9cb4caaf1505fcc8cbc1234>.

use of permits and seeks to implement new technologies and approaches to better manage and enforce the use of parking placards and improve curb operability.

OFF-PEAK TRUCK DELIVERIES

Shifting truck deliveries to off-peak hours in lieu of the proposed CBD toll is one of the congestion reduction measures that the Project Sponsors analyzed as part of their evaluation of alternatives. The analysis concluded that restricting truck deliveries to off-peak periods would be logistically complex because this would require receivers to be open and willing to receive the deliveries in overnight hours. Based on research conducted for the Environmental Assessment (EA), many receivers may prefer regular-hour deliveries because they typically have more staff on hand, as opposed to off-hour deliveries that could require additional staff, security, lighting, and other costs.⁶ Further, depending upon how such restrictions were implemented, they might result in multiple small trucks making deliveries instead of a single large truck, thereby increasing vehicle numbers and vehicle miles traveled by trucks. Therefore, requiring trucks to make deliveries only in off-peak periods would not be sufficient on its own to meet the goals of the Project.

Nonetheless, the Project Sponsors favor off-hour deliveries for trucks, to reduce adverse effects related to truck traffic. The final toll structure would have variable toll rates, in which the toll amount would be lower during periods with lower congestion and higher during peak periods when congestion is greater (see response to **Comment 16**). This would encourage trucks to shift to off-peak periods for their deliveries. For the Final EA, the Project Sponsors have added two new mitigation commitments to incentivize off-peak truck deliveries: 1) a commitment to further reduce overnight toll rates; and 2) a commitment to expand NYCDOT's Off-Hours Delivery Program, a pilot program that provides support for businesses that shift their deliveries to off-peak periods. For more information, see the response to **Comment 39**.

RESTRICTING THE NUMBER OF TAXIS AND FHVS IN THE MANHATTAN CBD

While some commenters suggested that restricting the number of taxis and FHVs in the Manhattan CBD would reduce congestion, others stated that taxis and FHVs are a critical transportation service that they would like to remain unchanged with the CBD Tolling Program; some commenters also stated that with the anticipated reduction in vehicle transportation, taxi and FHV trips in the Manhattan CBD would be more reliable as a transportation mode. Indeed, according to the New York City Taxi and Limousine Commission (TLC), more than 200,000 drivers licensed by the TLC complete approximately 1,000,000 trips each day in New York City. Most trips in yellow cabs originate in Manhattan (97 percent), while other TLC-based services distribute trips more evenly across the boroughs. In fall 2019, taxis and FHVs made up 48 percent of all vehicles circulating in the Manhattan CBD.⁷ Restricting the number of taxis and FHVs in the Manhattan CBD would reduce the availability of a critical transportation service used by millions of people each day. It would also adversely affect taxi and FHV drivers, many of whom are minority populations, and therefore would raise concerns related to environmental justice.

⁶ Holguin-Veras, Jose, et al. September 2010. *Integrative Freight Demand Management in the New York City Metropolitan Area*. http://www.nyc.gov/html/dot/downloads/pdf/ohd_final-report.pdf.

⁷ NYCDOT analysis of traffic count data collected in 2019.

LICENSE PLATE RATIONING

License plate rationing consists of restricting a set of vehicles from entering a specified area on certain days based on the last digit of the vehicle's license plate. This was one of the congestion reduction measures evaluated during development of the 2007 New York City Traffic Congestion Mitigation Commission Study.⁸ The Project Sponsors incorporated the results of that previous evaluation into their consideration of alternatives for the CBD Tolling Program.

The 2008 study included a detailed analysis of license plate rationing, including a review of case studies from cities that use this congestion reduction measure. The analysis documented that in the case study cities reviewed, license plate rationing resulted in a shift of some vehicles from peak periods to off-peak periods, but overall there was no sustained improvement in air quality, no increase in subway ridership, and worsening air quality on weekends and other times outside of the periods where the license plate rationing was in effect. Mode shift was primarily to taxis and small buses rather than to subways, which counterbalanced any improvements likely to be achieved by reductions in auto travel. In addition, some drivers evaded the restrictions by becoming multi-vehicle households (with variably coded license plates).

The 2008 study concluded that in the New York City metropolitan region, it is likely that many residents would also seek to evade the restrictions through the use of multiple vehicles, and combating this would require a major change in how vehicle registrations are handled in the United States that would have to be implemented in multiple states in the region. The study also found that people would be likely to shift to taxis, and to shift their trips to days when the rationing did not restrict their vehicle. Moreover, it found that any reduction in vehicles on particular days because of license plate numbering might be countered by an increase in demand by vehicles that were permitted on those days (which would take advantage of the reduced congestion on the roadways). In addition, the 2008 study noted, "Since households with more than one vehicle are better positioned to avoid the ban, License Plate Rationing is more favorable to households with multiple vehicle ownership, which is highly correlated with income."⁹ Although not specifically noted in the 2008 study, restricting vehicle access by license plate would adversely affect drivers of households with only one vehicle who have no alternative for traveling to the Manhattan CBD, since they would not be permitted to drive on certain days.

INCREASING SPEED LIMITS AND ELIMINATING TRAFFIC SIGNALS

In 2014, the City of New York adopted the Vision Zero policy, a citywide policy to reduce the number of injuries and fatalities that result from traffic crashes. As part of this policy, for all streets where the speed limit was not otherwise posted, the speed limit became 25 mph. This speed limit is safer for pedestrians, cyclists, and vehicles. According to a press release at that time, "Pedestrians struck by vehicles traveling at 25 MPH are half as likely to die as those struck at 30 MPH." The press release also stated, "Won't lowering the speed limit make NYC traffic even worse? No. Travel time is primarily determined by factors like traffic

⁸ New York City Traffic Congestion Mitigation Commission, "Congestion Mitigation Strategies: Alternatives to the City's Plan" (December 10, 2007), Appendix J5: Cambridge Systematics, Inc., "Technical Memorandum: License Plate Rationing Evaluation," prepared for New York City Economic Development Corporation and New York City Department of Transportation (December 10, 2007).

⁹ *Ibid.* pp. 3-4.

signals, congestion, double-parked vehicles, and turning vehicles. A 25 MPH citywide speed limit will effectively impact those drivers traveling at excessive, unsafe speeds. Coupled with comprehensive education and enforcement campaigns, a lower citywide speed limit will save lives.”¹⁰ Consequently, increasing speed limits would be counter to established City policy, would endanger safety of pedestrians, cyclists, and motorists, and would not contribute to decreased congestion.

Similarly, an initiative of eliminating traffic signals as suggested by some commenters would be in conflict with the Vision Zero policy. Traffic signals provide safer intersections for vehicular operations, and, most importantly, provide safe crossing locations for pedestrians.

OTHER INITIATIVES

Other alternatives the Project Sponsors evaluated were found not to meet the purpose and need for the Project, because they would not be effective at reducing congestion and/or would not raise sufficient revenue. Other suggestions made by commenters, such as building connector roads that bypass the city, are outside the scope of this Project and would not meet the purpose and need for the Project; new “connector” roads in particular would result in adverse environmental effects in the locations where they would be built, would be unlikely to reduce congestion in the Manhattan CBD (given that many roads already allow traffic to bypass the CBD), and would not raise revenue for MTA capital projects.

Comment 3: Are there other methods for generating funds for future transportation improvements?

The purpose of the Project is to reduce traffic congestion in the Manhattan CBD in a manner that would generate revenue for future transportation improvements, pursuant to acceptance into FHWA’s VPPP. FHWA and the Project Sponsors established the following objectives to further refine the Project purpose:

- Reduce daily VMT within the Manhattan CBD.
- Reduce the number of vehicles entering the Manhattan CBD daily.
- Create a funding source for capital improvements and generate sufficient net revenues to fund \$15 billion for MTA capital projects.
- Establish a tolling program consistent with the purposes underlying the New York State legislation entitled the “MTA Reform and Traffic Mobility Act.”

More information on the purpose and need for the Project is provided in the EA in **Chapter 1, “Introduction.”**

Commenters suggested other sources of revenue, such as tolling the East River bridges rather than the entire Manhattan CBD, raising transit fares, raising tolls at existing tolled crossings, pursuing turnstile jumpers, and pursuing toll evaders. In addition, some commenters suggested alternative sources of funding outside the purview of the Project Sponsors, such as new taxes on landlords and new taxes on legalized

¹⁰ <https://www1.nyc.gov/assets/queenscb10/downloads/pdf/notifications/25mph.pdf>

cannabis sales, among others. Commenters also suggested that alternatives evaluated that would not meet the Project purpose, need, and goals individually might instead meet those targets in combination.

ALTERNATIVES EVALUATED BY THE PROJECT SPONSORS

A variety of congestion management strategies and revenue enhancements for transit have been evaluated over many decades and have proven ineffective, difficult, or not viable to implement. These included many of the suggestions made by commenters. The Project Sponsors evaluated a range of alternatives for raising revenue and reducing congestion, including parking pricing strategies, and toll alternatives (e.g., raising tolls on existing facilities, tolling East River and Harlem River bridges that are currently untolled, using high-occupancy toll lanes).

In evaluating these alternatives, the Project Sponsors found that some strategies would fail to reduce congestion or raise revenue so as to meet the Project's purpose and need. Others would reduce congestion but would not raise revenue; or would raise revenue but not reduce congestion. Overall, the Project Sponsors concluded that the only alternative that would meet the Project's purpose and need was the CBD Tolling Alternative. A summary of the conclusions with respect to alternatives that would raise revenue is as follows:

- **Parking pricing strategies:** This alternative would take one or more of several forms, including elimination of the resident exemption for the parking tax or raising the tax, increased rates for metered on-street parking, and/or introduction of an overnight on-street parking fee. This alternative would not reduce congestion enough to meet the Project goals.
- **Raising tolls or implementing variable tolls on existing facilities:** This alternative would not generate adequate revenue to meet the Project goal. In addition, with some crossings remaining untolled, traffic would divert to untolled facilities, thereby reducing the revenue and not reducing traffic. Further, this alternative would not target congestion in the Manhattan CBD, given that a number of free entry points to the Manhattan CBD would remain available.
- **Implementing tolls on untolled East River and Harlem River Bridges:** Earlier studies showed this alternative would reduce congestion and could raise adequate toll revenues to meet the Project goal. This would require an agreement between the City of New York and MTA to direct the revenue to the MTA Capital Program. In addition, the 2008 New York City Traffic Congestion Mitigation Commission Study identified a number of disadvantages to this alternative, including the following:
 - This alternative would not address trips that start and end within Manhattan, such as trips beginning or ending on the Upper East Side and Upper West Side.
 - This alternative would adversely affect local trips between the South Bronx and Harlem/Washington Heights, which could result in a local adverse economic impact in two environmental justice communities.
- **Implementing high-occupancy toll (HOT) lanes:** Creating HOT lanes for passenger cars on major crossings into Manhattan and highways leading to the Manhattan CBD would result in limited revenue and congestion reductions, since free lanes would remain on the same highway.

In terms of whether any alternatives evaluated that would not meet the Project purpose, need, and goals individually could instead meet those objectives in combination, the alternatives combined would not generate adequate revenue to meet the need to generate sufficient annual net revenues to fund \$15 billion for capital projects for MTA's Capital Program. Thus, while multiple alternatives in combination might serve to reduce congestion sufficient to meet the Project objectives, they would still fail to meet the Project's revenue goal.

The EA describes the evaluation the Project Sponsors conducted of alternatives to generate revenue and reduce congestion in **Chapter 2, "Project Alternatives,"** and **Appendix 2A, "Previous Studies and Concepts Considered."**

OTHER ALTERNATIVES PROPOSED BY COMMENTERS

As noted earlier, some commenters suggested other alternatives for raising revenue, beyond tolling alternatives. These alternatives would not target the causes of congestion—i.e., vehicles—and therefore would not be effective at reducing congestion. Some of those alternatives are discussed below:

- **Targeting evasion (e.g., turnstile jumpers) and toll evasion:** Reducing payment evasion is already a major priority for MTA. The agency currently has many management initiatives under way to improve payment rates across the subways, buses, commuter rail, and bridges and tunnels. MTA also has an outside [blue-ribbon panel](#) that is helping them find fresh solutions to this ongoing issue. However, even if the agency collected every fare and toll, that would not address the need to provide a sustainable funding source for the MTA Capital Program—the need being addressed by the CBD Tolling Program. First, it would not raise enough revenue. The CBD Tolling Program would generate an estimated \$1 billion annually, which is about double the amount MTA expects to lose to payment evasion this year. Second, it would not meet the need for funding for MTA's Capital Program. Revenue from fares and tolls is used to fund MTA's operating budget, including debt service. Revenue from the CBD Tolling Program is required by law to be used for MTA's capital budget: the critical task of rebuilding and modernizing the system over time through major physical projects. Finally, this would not reduce traffic congestion.
- **Raising transit fares:** MTA periodically adjusts transit fares (and tolls) to increase revenues and offset inflationary growth in costs. The November Financial Plan published in 2022 assumes fares and tolls will be increased in 2023 and in 2025 to generate a 5.5 percent increase in such revenues each time. While the MTA works diligently to control costs, pre-pandemic combined fares and tolls covered only approximately half of operating costs and slightly more than one-third of total expenses, which includes capital costs. Furthermore, this alternative would not meet the purpose, need, and goals for the Project. Higher transit fares would not lead to decreased congestion in the Manhattan CBD. Rather, it would more likely discourage the use of transit, potentially increasing vehicular traffic.
- **Other revenue sources, such as new taxes on landlords and new taxes on legal cannabis sales:** Other revenue sources such as those cited are outside the purview and control of the Project Sponsors. In addition, these suggestions would result in adverse effects in terms of other public policies. For example, introducing new taxes on landlords would ultimately result in higher rents, which would adversely affect tenants whether or not they contribute to congestion. Taxes on the new recreational cannabis program would be contrary to the goals of the program, which seeks to begin the work of

repairing decades of disproportionate enforcement and overcriminalization of cannabis prohibition, especially in Black and Brown communities.¹¹ In the new program, all cannabis taxes would be deposited in the New York state cannabis revenue fund, which would be used to support education, community grants, drug treatment, and public education. In addition, these and similar alternatives would not contribute to congestion reductions.

Comment 4: How will the revenue from this Project be spent and how will the public know the funds are being used appropriately?

As currently designed, after expenses related to the Project are paid, the CBD Tolling Program revenues would be sufficient to fund \$15 billion for capital improvements included in the MTA's 2020–2024 Capital Program. The funding would be achieved through the issuance of bonds and cash (PayGo) financing. Consistent with the Traffic Mobility Act, revenues would be directed to a "lockbox" fund that may not be commingled with other funds.¹² As established by the Traffic Mobility Act, the net revenue generated by the CBD Tolling Program would be used to fund transit and commuter rail projects in the MTA 2020–2024 Capital Program and successor programs.

The MTA 2020–2024 Capital Program identifies \$52.0 billion of investments in the region's subways, buses, and commuter railroads.¹³ Some of these capital projects would expand the system and others would address existing deficiencies to ensure the long-term viability of current assets. Key tenets of the 2020–2024 Capital Program include the following:

- Investing to improve reliability
- Committing to environmental sustainability
- Building an accessible transit system for all New Yorkers
- Easing congestion and creating growth
- Improving safety and customer service through technology

Detailed information on the projects included in the 2020–2024 Capital Program is available on MTA's website: <https://new.mta.info/capital/2020CapitalProgram>.

As specified in the Traffic Mobility Act, the revenue from the CBD Tolling Program would be allocated as follows:

- 80 percent to New York City subways and buses (New York City Transit, Staten Island Rapid Transit Operating Authority, and MTA Bus Company), with priority given to the subway system, new signaling, new subway cars, track and car repair, accessibility, buses and bus system improvements and further

¹¹ <https://cannabis.ny.gov/adult-use-information>.

¹² Public Authorities Law § 553-j.

¹³ This reflects the portion of the capital program that will fund transit improvements; it includes an additional \$254 million for other transit projects not identified here, as well as a December 2021 amendment that increased the transit- and rail-related portion of the program by \$535 million. The full capital program, including non-transit improvements, includes \$55.3 billion in projects.

investments in expanding transit availability to areas in the outer boroughs that have limited mass transit options

- 10 percent to Metro-North Railroad, including but not limited to, parking facilities, rolling stock, capacity enhancements, accessibility, and expanding transit availability to areas that have limited mass transit options
- 10 percent to Long Island Rail Road, including but not limited to, parking facilities, rolling stock, capacity enhancements, accessibility, and expanding transit availability to areas that have limited mass transit options

As noted in response to **Comment 5**, each year, as required by the Traffic Mobility Act, the Triborough Bridge and Tunnel Authority (TBTA) and MTA would report on the revenues and expenses related to the Project. As stated in Section 553-j of Article 3, Title 3 of the New York State Public Authorities Law, as amended:

The authority [MTA and TBTA] shall report annually on all receipts and expenditures of the fund. The report shall detail operating expenses of the central business district tolling program and all fund expenditures including capital projects. The report shall be readily available to the public, and shall be posted on the authority's website and be submitted to the governor, the temporary president of the senate, the speaker of the assembly, the mayor and council of the city of New York, the metropolitan transportation authority board, and the metropolitan transportation authority capital program review board.

In addition, MTA reports regularly on legislative, financial, and governance issues. This includes detailed information about MTA agencies' performance data; operating and capital budgets; public meetings and hearings; open data resources; bonds, notes, and securities; and revenue information. This information is available on the agency's website at <https://new.mta.info/transparency/financial-information/financial-and-budget-statements>.

For more information, see the EA, Chapter 2, "Project Alternatives," Section 2.4.2.

Comment 5: *Why does MTA need additional revenue when it already receives regular funding from other sources? MTA's budgeting and expenditures should be subject to oversight to ensure money is spent appropriately.*

MTA draws funding from several sources. MTA's revenues include commuter rail, subway, and bus fares, and tolls at TBTA crossings; state and local subsidies that include dedicated state taxes (e.g., petroleum business taxes, sales tax, payroll mobility tax, motor vehicle registration and license fees, taxi and FHV fees, real estate transaction taxes on both residential and commercial properties); and station maintenance payments. The taxi and FHV fees consist of a surcharge of \$2.50 on yellow taxi trips and \$2.75 on FHV trips, effective January 1, 2019, on all trips that originate in or enter Manhattan south of 96th Street, and a surcharge of \$0.75 per passenger is added to all pooled for-hire trips.

Appendix 18A: Responses to Frequently Received Comments

In addition to the revenues and subsidies identified above, the Federal Transit Administration supports MTA transit and commuter capital projects through formula grants, full-funding grant agreements, and other funding programs.

MTA uses its available funding to operate its integrated transportation network, make long-range capital improvements to the system's infrastructure, and expand the system. The MTA network has the nation's largest bus fleet and more subway and commuter rail cars than all other U.S. transit systems combined. Pre-pandemic, it provided around 2.6 billion trips each year, which accounts for almost 40 percent of the nation's transit users. The size and complexity of the MTA physical system are not its only financial challenges. On the expense side, there are many significant expenses outside the direct control of MTA — including health and welfare costs, pension payments, electric power and fuel costs, and insurance expenses. Taken together, they comprise about 40 percent of MTA's expenses. Furthermore, tax and subsidy revenues are impacted by the economy and are also outside of MTA's direct control. Farebox revenue is impacted by personal travel needs and choices, as well as fare levels that are capped. All of these items contribute to a structural imbalance in MTA's finances.

Despite the critical importance of the MTA network to the city and region, there is a history of gaps in funding when economic conditions reduce the tax base; when the Federal, state, or local governments reduce subsidies; and when the cost of needed transit improvements exceeds the available funding. The New York State Legislature passed the Traffic Mobility Act to provide stable and reliable funding to repair and revitalize the regional transit system. As required by the Traffic Mobility Act, "For purposes of establishing a central business district toll or tolls the board [of the TBTA] shall, at minimum, ensure annual revenues and fees collected under such program, less costs of operation of the same, provide for sufficient revenues into the central business district tolling capital lockbox fund ... necessary to fund fifteen billion dollars for capital projects for the 2020 to 2024 MTA capital program, and any additional revenues above that amount to be available for any successor programs."¹⁴

With respect to transparency, MTA reports regularly on legislative, financial, and governance issues, with information available for public review on MTA's website (<https://new.mta.info/transparency>). This includes detailed information about MTA agencies' performance data; operating and capital budgets; public meetings and hearings; open data resources; bonds, notes, and securities; and revenue information. Details on MTA's operating and capital budgets are also available on the agency's website, including funding sources and how the money is spent.

After the Great Recession of 2008 and the subsequent economic downturn, MTA formalized a Budget Reduction Program (BRP). The BRP establishes savings targets for each of MTA's operating agencies, who must identify annual and/or recurring savings to meet the targets set for each 5-year financial plan. Since 2010, the MTA has implemented recurring savings through the BRP totaling over \$3 billion. BRP savings targets have ranged from large initiatives such as reducing overtime costs in the Department of Subways in 2021, which saved \$105 million, to small initiatives such as health care opt-out savings in 2014, which saved \$11 million. In 2019, MTA hired a management consulting firm to review operations throughout the

¹⁴ Vehicle and Traffic Law Article 44-c § 1704-a(1).

organization and to recommend changes to consolidate and streamline internal processes and functions. The resulting consolidation of functions was projected to generate recurring annual savings of \$475 million starting in 2022. It is further anticipated that additional annual savings of \$100 million will result from ongoing efforts being spearheaded within the newly consolidated functional departments. In addition to these savings programs and actions that have already been taken to balance prior Financial Plans, MTA continues its efforts to identify opportunities for further efficiency.

MTA budgeting is a rigorous and in-depth annual process. The MTA Financial Plans are prepared and scrutinized both internally and by many external stakeholders: the Governor's Division of the Budget, the State Legislature, the New York City Council, the Office of the State Comptroller, and the public. The process begins each spring and culminates with the passage of the MTA Budget in December. Over the course of each year, MTA prepares a February, July, and November Financial Plan, with Budget Adoption Materials in December. In addition to the then-current year, each Financial Plan includes 4-year projections which include the then-upcoming year and three future calendar years thereafter. The budget process and related information can be found at: <https://new.mta.info/budget>; recent Financial Plan information can be found at: <https://new.mta.info/transparency/financial-information/financial-and-budget-statements>.

MTA's website also includes information on capital projects under way, including progress to date, in the Capital Program Dashboard (<http://web.mta.info/capitaldashboard/CPDHome.html>). The Dashboard, updated quarterly, tracks progress on MTA's 5-year Capital Plans, starting with selected projects in the 2005–2009 Capital Plan, and including nearly all projects in the 2010–2014, 2015–2019, and 2020–2024 Capital Plans.

For more information on the need for revenue, see the EA, Chapter 1, "Introduction," Section 1.4.2.

Comment 6: Why does MTA need additional revenue when it received billions of dollars in COVID-relief funding?

MTA received more than \$15 billion in funding from the Federal government during the COVID-19 pandemic, which was used to continue operations and provide service to essential workers throughout the city and the region, including police, firefighters, hospital workers, and grocery store clerks, among others. This funding was needed because of the substantial reduction in ridership and traffic which resulted in decreased fare and toll revenue. Specifically, MTA lost over 95 percent of its ridership and farebox revenue at the peak of the pandemic. Compared to other transportation entities, MTA is more reliant on farebox and toll revenue to cover its expenses. In 2019, before the pandemic, MTA's fare and toll revenues (\$8.422 billion) covered more than half of MTA's expenses (\$16.582 billion), with the remainder covered by economically sensitive taxes and other subsidies. The COVID-19 relief funding was used entirely to fund continued MTA operations for essential workers; it did not fund capital investments.

Even before the pandemic, there was a need for additional revenue to fund capital investment; the New York State legislature passed the Traffic Mobility Act, which was signed into law by the Governor in April 2019, to reduce congestion in the Manhattan CBD and create a new, recurring, local revenue source for

transit investment. Because there have not been other new sources of revenue to fund MTA capital projects identified, there is continued need for the Project.

Comment 7: Why is the CBD Tolling Program still being progressed, given that we are still recovering from the COVID-19 pandemic?

The Project Sponsors recognize that the region is still recovering from the effects of the pandemic. Unemployment in New York City is higher than the national average, and prominent sectors of the Manhattan CBD economy such as retail and dining, hospitality, and entertainment have been slower to recover than other sectors of the local economy.^{15, 16} MTA ridership also has not fully rebounded; weekday subway and bus ridership was between 62 and 65 percent of its pre-pandemic level during fall 2022.¹⁷ However, as evidenced by bridge and tunnel crossing volumes into the Manhattan CBD, traffic congestion has already returned. Discretionary travel to the CBD for shopping, entertainment, dining, and other purposes has also experienced a robust recovery. Overall, traffic volumes and speeds are approaching pre-pandemic levels. Vehicle traffic at TBTA bridges and tunnels has returned to its 2019 levels (<https://new.mta.info/coronavirus/ridership>). Similarly, in September 2022, daytime inbound traffic volumes on the Brooklyn, Manhattan, Williamsburg, and Ed Koch Queensboro Bridges were within 15 percent of pre-pandemic levels, despite the 2021 conversion of one inbound vehicle lane on the Brooklyn Bridge into a bike lane, the change on the Brooklyn–Queens Expressway between Atlantic and Sands Street from three to two lanes, and ongoing rehabilitation work on the upper deck of the Queensboro Bridge. September 2022 Midtown Manhattan daytime traffic speeds and traffic speeds fell to an average of 5.4 mph, only 10 percent above pre-pandemic levels. As activity is returning to pre-COVID-19 pandemic conditions, so is traffic congestion.

In addition, the benefits of the Project would support the economic recovery of the Manhattan CBD and region. The Project would provide a stable source of funding that can sustain and ready the transit system as the numbers of residents, workers, and visitors rebound to pre-pandemic levels. A modern and efficient transit system is and would remain the backbone of the transportation network. Reduced congestion would also benefit large and small businesses by increasing productivity by reducing the time required for deliveries and to make service calls. For more information on the economic effects of the Project, see the response to **Comment 31**.

Comment 8: Why does the EA rely on 2019 data, which does not reflect post-COVID conditions?

The EA uses 2019 data, which reflects conditions prior to the COVID-19 pandemic, as the baseline for the environmental analysis. This includes quantified traffic counts conducted at study area intersections in

¹⁵ New York Times. "In New York City, Pandemic Job Losses Linger – The New York Times." September 14, 2022. Accessed on October 7, 2022. <https://www.nytimes.com/2022/09/14/nyregion/nyc-covid-job-losses.html>.

¹⁶ The New School Center for New York City Affairs. Accessed October 7, 2022. <http://www.centrernyc.org/reports-briefs/essential-and-remote-working-industry-jobs-surpass-pre-pandemic-levels-while-employment-in-face-to-face-industries-lags-by-more-than-nine-percent>

¹⁷ MTA NYC Transit, "New York City Transit Key Performance Metrics," November 2022, pg. 10 <https://new.mta.info/document/100341>

2019 and social and economic datasets developed by the U.S. Census Bureau that reflect 2019 conditions. The Project Sponsors used pre-COVID-19-pandemic baseline conditions to define near-term 2023 No Action Alternative conditions as the region rebounds and to forecast long-term future conditions to 2045. The use of these data reflects the return of traffic volumes and other conditions to pre-pandemic levels as described below.

This data reflects normal, typical conditions, which are an appropriate baseline for the environmental analysis rather than the use of unusual conditions. This allows FHWA and the Project Sponsors to understand the potential effects of the proposed CBD Tolling Program in consideration of those normal background conditions.

As noted in response to **Comment 7**, recent data indicates that traffic is now at or close to pre-pandemic levels, whereas transit ridership continues to lag significantly, with average weekday ridership maintaining approximately 60 to 65 percent of comparable pre-pandemic days across the region.¹⁸ While many office workers continue to work remotely, others have returned to offices or work locations on part-time or full-time schedules. In addition, tourism, entertainment, and retail activity is returning to its previous levels. As activity is returning to pre-COVID-19 pandemic conditions, so is traffic congestion.

Use of 2019 data throughout the EA for the quantified analyses of the potential effects of the CBD Tolling Alternative—i.e., the analyses related to potential changes in traffic and potential increases in transit ridership—accounts for conditions that would occur in the future if traffic levels and transit ridership return to pre-COVID conditions. Currently, MTA forecasts that transit ridership will return to 80 percent of pre-COVID levels by 2026, and traffic levels throughout the region have already largely returned. If traffic and transit levels do not fully rebound, then the use of pre-pandemic information for the baseline analysis results in predictions of larger negative effects as a result of the proposed CBD Tolling Alternative than would actually occur. See also the response to **Comment 26**.

For more information on the analysis framework for the EA, see the EA, **Chapter 3, “Environmental Analysis Framework.”**

Comment 9: *Why was the Best Practice Model (BPM) used for the analyses in this EA and are the results, which demonstrate congestion reduction and revenue generation, reliable?*

FHWA and the Project Sponsors used a regional transportation model, the Best Practice Model (BPM), to evaluate the effects of introduction of a new CBD toll on travel patterns in the 28-county region that is the main catchment area for travel to and from the Manhattan CBD. The BPM is an activity-based model that is recognized by FHWA, the Federal Transit Administration (FTA), and the U.S. Environmental Protection Agency (USEPA) for multiple purposes including transportation planning and meeting the requirements of the Clean Air Act. It simulates the number and types of journeys, choice of destinations, choice of modes, choice of stops on journeys, and choice of time of day for journeys that are made on an average weekday

¹⁸ MTA. “Day by Day Ridership Numbers.” Accessed on October 9, 2022. <https://new.mta.info/coronavirus/ridership>.

Appendix 18A: Responses to Frequently Received Comments

in the region by each resident. The model includes the region's entire roadway network and public transportation network, including travel times and travel costs, and can predict changes in travel behavior as changes occur to that network.

FHWA and the Project Sponsors evaluated seven different tolling scenarios for the environmental analysis of the proposed CBD Tolling Alternative, to understand how introduction of a new toll would affect travel behavior. To analyze the range of effects the CBD Alternative could have, the tolling scenarios vary in their assumptions about the amount of the toll for different types of vehicles, the times tolls would be imposed, exemptions from tolling, crossing credits for tolls paid on other toll tunnels or bridges, and discounts in the form of "caps" on the number of tolls per 24-hour period to be applied to different types of vehicles. For each tolling scenario, FHWA and the Project Sponsors used the BPM to predict how many people would continue to access the Manhattan CBD by vehicle, including the specific routes they would use; how many would make their journey by another mode, including the specific modes they would use; and how many would no longer make their journeys. These results also allowed FHWA and the Project Sponsors to estimate the toll revenue that would be generated by each tolling scenario.

As shown in **Table 18A-1** below, the modeling demonstrates that the CBD Tolling Alternative would reduce congestion and generate revenue sufficient to meet the Project goals.

Table 18A-1. Evaluation Results for the CBD Tolling Alternative

CRITERION	RANGE OF RESULTS FOR TOLLING SCENARIOS EVALUATED
Reduction in daily VMT within the Manhattan CBD	7.1% to 9.2%
Reduction in the number of vehicles entering the Manhattan CBD daily	15.4% to 19.9%
Annual net revenue generated (which would be invested or bonded so as to fund \$15 billion in capital projects)	\$1.02 billion to \$1.48 billion

Use of transportation models to evaluate the regional effects of proposed transportation initiatives is a customary procedure and is required as part of the regional transportation planning process for metropolitan regions, and required for compliance with the Clean Air Act and other Federal laws and regulations. In the New York metropolitan area, the entity responsible for regional transportation planning in compliance with those Federal processes is the New York Metropolitan Transportation Council (NYMTC), and the BPM is the regional transportation model NYMTC developed and uses for that purpose.

More information on regional transportation planning required by the Clean Air Act, including an overview of the planning process, how FHWA uses regional transportation models in its review of proposed projects in accordance with National Environmental Policy Act (NEPA), and more information on the BPM, is provided below.

REGIONAL TRANSPORTATION PLANNING REQUIRED BY THE CLEAN AIR ACT

The Clean Air Act and other Federal laws and regulations establish a regional planning process that metropolitan areas must follow to be eligible to receive Federal funding of transportation projects, and for

compliance with air quality standards. This planning process involves consideration of travel and transportation issues and needs, demographic and economic conditions, and travel patterns and trends. In metropolitan areas over 50,000 population, the responsibility for transportation planning lies with designated Metropolitan Planning Organizations (MPO). For the New York metropolitan area (New York City, Long Island, and the Hudson Valley), the designated MPO is NYMTC. In New Jersey, the MPO for the New York City area is the North Jersey Transportation Planning Authority (NJTPA).

Regional transportation planning includes a highly coordinated approach based on the current and forecasted information that includes population, employment, land use, and socioeconomic information. MPOs oversee the development of Regional Transportation Plans (RTPs) and Transportation Improvement Programs (TIPs). In addition, there are also Clean Air Act requirements that must be met before a Federal agency can approve and/or fund projects. These are discussed below and transportation planning statutes 23 USC §§ 134 and 135 and the regulations in 23 CFR § 450 outline the requirements and the process.

Regional Transportation Plan

The RTP is a Federally required planning product that lays out the region's long-term transportation needs and goals over a long-term time frame. It includes current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan (usually a 20- to 30-year planning horizon). The plan also includes existing and proposed transportation facilities, transit operations, nonmotorized transportation facilities (sidewalks and bicycle facilities) and intermodal connectors that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. The CBD Tolling Program is included in the region's RTP. There are also performance targets used to assess the transportation system and operational management strategies. To meet FHWA requirements, NYMTC's RTP must be financially "constrained," demonstrating adequate funding is available for all future projects.

Transportation Improvement Program (TIP)

In addition to the RTP, NYMTC must also develop a TIP that also must demonstrate fiscal constraint and is subject to Clean Air Act conformity requirements (see below). The TIP documents NYMTC's medium-range transportation improvements that are eligible for Federal funding and are projects implemented over a 5-year period that include bridges, highways, transit services, bikeways, and walkways. The CBD Tolling Program is included in the latest NYMTC TIP. The TIP is derived from and consistent with NYMTC's RTP.

Air Quality Conformity

To comply with the Clean Air Act, NYMTC must demonstrate that transportation projects included on its RTP and TIP will be consistent with (conform to) the air quality goals established by New York's state air quality implementation plan (SIP). SIPs are developed to establish the procedures the state will follow to achieve compliance with the National Ambient Air Quality Standards (NAAQS) of the Clean Air Act for pollutants where violations of the NAAQS has occurred. SIPs must be approved by the USEPA. Areas where air quality monitoring shows a violation of the NAAQS are designated "nonattainment." Once a

Appendix 18A: Responses to Frequently Received Comments

nonattainment area is shown through air quality monitoring to have met a NAAQS, USEPA will designate the area as a “maintenance area.”

For areas that are designated as nonconformity areas or maintenance areas, like the New York metropolitan area, the RTP and TIP must meet the USEPA’s requirements for air quality conformity. NYMTC must demonstrate that projects on the RTP and the TIP would not 1) cause or contribute to any new violation of the NAAQS; 2) increase the frequency or severity of any existing NAAQS violations; or 3) delay timely attainment of the NAAQS or any required interim emissions reductions or other milestones in any area. Air quality conformity ensures that the planned projects in the RTP or TIP would not make air quality in the region worse.

Use of Travel Demand Forecast Models by MPOs

The Federally mandated transportation planning processes described above require the ability to forecast travel demand on the transportation system through models that consider the complex movement of individuals and goods in order to meet the changing needs of the traveling public. NYMTC developed and maintains the BPM specifically for this purpose. NYMTC uses the BPM to forecast travel demand and as part of its analysis of transportation conformity.

Transportation Planning and NEPA

For an individual project that requires Federal approvals, and therefore is subject to evaluation in accordance with NEPA, evaluation of the project’s potential effects must be consistent with the larger regional transportation modeling. If the region, like the New York metropolitan area, is designated as a nonattainment or maintenance area for Clean Air Act NAAQS exceedances, transportation conformity requirements must be met before FHWA or FTA can fund or provide any approvals for an individual highway or transit project unless the project is exempt from conformity requirements. A project-level conformity determination addresses consistency with regional conformity determinations, and, where necessary, localized emissions. The project-level conformity determination must demonstrate that: 1) the project is included in the currently conforming regional transportation plan and TIP for the metropolitan area; and 2) where applicable, the project would not cause any localized exceedances of the NAAQS as determined by a project specific hot-spot analysis. FHWA requires that the effects of the project be evaluated using the same model—the BPM—that was the basis for the MPO’s conforming transportation plan. This ensures consistency with the RTP and TIP.

BPM

The BPM was developed by NYMTC for use in its transportation planning processes and is the Federally recognized transportation forecasting tool for the region. The NYMTC version of the BPM used for this study was developed for NYMTC’s 2017 Regional Transportation Plan and Federal air quality conformity determination. It includes the 28 counties of the regional study area evaluated in the EA. NYMTC regularly updates and calibrates the BPM as part of its regional transportation planning responsibilities, including updating the model’s demographic data, future employment and population projections, and changes in the underlying transportation network.

The BPM predicts changes in future travel patterns in response to changes in the demographic profiles and transportation systems in the region. It incorporates transportation behavior and relationships with an extensive set of data that includes a major travel survey of households in the region, land-use inventories, socioeconomic data, traffic and transit counts, and travel times.

BPM Calibration and Validation

The version of the BPM that the Project Sponsors used for the EA was released in 2015 and is primarily calibrated to 2010 conditions, based on a regional household survey conducted in 2010. Since the BPM is a regional model, it is calibrated to reproduce important regional metrics from the household survey related to auto ownership, frequency of trips/journeys by travel purpose, choice of travel modes, and choice of destinations. In addition, due to this Project's need to estimate changes in trips to or from the Manhattan CBD, the BPM's mode and destination choice components were further calibrated to better match worker travel flows from the 2012-2016 Census Transportation Planning Package (CTPP).

When a regional model like the BPM is applied for specific projects, it is common to calibrate and validate the model for corridor- or project-specific metrics. For this project, adjustments were made to calibrate the model so that it could reasonably replicate traffic volumes that would be subject to tolling at 60th Street, the East River crossings, and Hudson River tunnels. The model's traffic and transit volumes were validated against observed traffic and transit volumes at these key crossing locations into the Manhattan CBD.

Model Sensitivity

A calibrated and validated model was necessary for Project use, but it was important not to over-calibrate the model, which would reduce the sensitivity of the model for evaluating the policy in question: the willingness of various groups of travelers to pay tolls. Willingness to pay is primarily represented in the BPM by values of time assigned to groups of travelers (segmented by three income categories: low, medium, and high) and two travel purposes (work and non-work). In addition, the BPM assigns values of time for commercial vans, small trucks, and large trucks. Throughout early testing of Project tolling scenarios, the model was determined to be reasonably sensitive to changes in tolls applied at the Manhattan CBD crossing locations, which caused travelers to switch destinations, modes, or travel routes.

Comment 10: Why did FHWA and the Project Sponsors prepare an Environmental Assessment for the Project?

The requirements of NEPA apply to the CBD Tolling Program due to the Federal decision (the Federal action) regarding whether to accept the Project Sponsors' application to the VPPP, which would allow them to move forward with the CBD Tolling Program. The initial Federal legislation for the VPPP was passed in 1991 (Section 1012(b)(8) Intermodal Surface Transportation Efficiency Act – ISTEA), then amended in 1998 by TEA-21 (Section 1216 of Transportation Equity Act for the 21st Century), followed by amendments from SAFETEA-LU in 2005 (Section 1604(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Public Law 109-59).

Appendix 18A: Responses to Frequently Received Comments

In accordance with NEPA, FHWA requires an EA to help determine the significance of a project's environmental effects when such effects are unlikely or unknown. Before a Federal agency takes an action, NEPA requires the Federal agency to evaluate and disclose the environmental effects of the action. An EA (40 CFR § 1501.5) is prepared to ensure Federal agencies consider the environmental effects of their actions in the decision-making process (40 CFR § 1500.1(a)) when a proposed action is not likely to have significant effects or the significance of the effect is unknown (40 CFR § 1501.5). If the adverse effects are not significant or can be mitigated below significant levels, the Federal agency may issue a Finding of No Significant Impact (FONSI) (40 CFR § 1501.6). If there are significant effects that cannot be mitigated, then the Federal agency must require an Environmental Impact Statement (EIS) culminating in a Record of Decision (ROD).

For this Project, FHWA determined the significance of the effects was unknown, and therefore an EA was necessary to help determine significance. Following the public comment period, FHWA considered the findings of the EA, including mitigation and enhancement measures, as well as the public comments. Subsequently, FHWA worked with the Project Sponsors to develop additional mitigation and enhancement measures to ensure that all significant effects of the CBD Tolling Alternative are mitigated below a level of significance.

The EA provides a thorough analysis, similar to what would be included in an EIS, of the full range of potential effects that may occur as a result of implementation of the Project. The analysis in the EA includes a detailed evaluation of the potential effects of the CBD Tolling Alternative on travel patterns, including traffic flows, traffic congestion, parking, transit ridership, and air quality, based on the region's adopted regional transportation model (see response to **Comment 9**). This includes quantified analyses of traffic conditions at 102 different intersections, the effects of additional transit riders on line-haul capacity and individual stations, and regional and localized effects on air quality.

This Project would result primarily in operational changes with very little direct physical impact on the existing environment. The approach to reducing congestion in the Manhattan CBD lends itself towards beneficial effects on air quality and quality of life in the CBD. The physical impact of the Project would consist of mounting equipment on utility poles in a cordon area around the proposed tolling zone in Manhattan. In some cases, existing utility poles would be replaced with larger poles.

However, there was recognition that the effects from this Project could extend to the 28 counties in the regional study area. As a result, FHWA requested that the NEPA process include enhanced public outreach and coordination with Federal and state resource agencies as well as enhanced outreach to environmental justice populations. The effects on environmental justice populations throughout the Project study area were carefully evaluated in the EA. See response to **Comment 36** for further information about the findings of the analysis.

In addition, FHWA may adopt mitigation and apply monitoring or enforcement provisions. If FHWA finds no significant impacts after taking into account the mitigation, the mitigated finding of no significant impact shall state any enforceable mitigation requirements or commitments that would be undertaken to avoid

significant impacts (40 CFR § 1501.6). Table 16-1 in Chapter 16 of the EA summarizes the effects of the Project and associated mitigation measures.

Comment 11: Can the 30-day public comment period be extended?

The public comment period was initially advertised as extending from August 9, 2022, through September 9, 2022, and was subsequently extended by 14 days to September 23, 2022. FHWA and the Project Sponsors originally provided a public comment period on the EA consistent with Council on Environmental Quality requirements for public involvement for NEPA documents and the FHWA agency statutory requirements found in 23 U.S.C. 139(g)(2)(B). The FHWA statutory requirements require a 30-day comment period for an EA and allow for extension of the comment period by the lead agency for good cause. In this case, due to the level of detail and analysis in the EA and numerous requests for the comment period to be extended, the comment period was extended.

Comment 12: What public outreach was conducted during the NEPA process?

Both during and following preparation of the EA, FHWA and the Project Sponsors provided meaningful opportunities for public participation and engagement related to the Project. This included outreach while the EA was being prepared, which helped inform the analyses included in the EA; outreach and a public comment period after release of the EA; and outreach targeted to environmental justice populations, as described below.

EARLY PUBLIC OUTREACH PRIOR TO RELEASE OF THE EA

FHWA and the Project Sponsors provided extensive opportunities for public participation while the EA was being prepared. The public involvement strategy for the Project focused on outreach to the 28-county regional study area, which represents the main catchment area for trips made to and from the Manhattan CBD.

In late 2021, the Project Sponsors held 19 virtual public meetings, 9 of which focused on environmental justice communities. Of these, two public sessions and three environmental justice sessions focused on participants from New Jersey; and one public session and three environmental justice sessions focused on participants from Connecticut. During each of those sessions, Project Sponsor staff provided real-time feedback to questions posed by the public including environmental justice populations. Nearly 400 speakers provided oral comments and, as of February 2022, there were over 14,000 views on the Project website/YouTube of the meetings and presentations from that early outreach. Chapter 18, “Agency Coordination and Public Participation,” of the EA provides more information on the early outreach the Project Sponsors conducted for the Project prior to publication of the EA.

OUTREACH AFTER RELEASE OF THE EA

FHWA and the Project Sponsors made the EA available for public review on August 9, 2022. A comment period was provided, during which members of the public, agencies, elected officials, and organizations could submit comments on the EA. The public comment period was initially advertised as extending from August 9, 2022, through September 9, 2022, but it was subsequently extended to September 23, 2022,

Appendix 18A: Responses to Frequently Received Comments

based on requests from members of the public. In August 2022, the Project Sponsors held 6 virtual hearings on the EA itself, during which 552 speakers offered oral testimony and many more participated during the livestream or watched later, at their convenience, via the Project website or YouTube (over 11,100 views as of November 23, 2022). Opportunities to provide comment during the public comment period included: providing oral testimony at one or more of the public hearings; filling out an online comment form; sending letters to designated MTA/FHWA representatives; sending emails to designated MTA/FHWA representatives; and leaving a voice message at a designated phone number.

Unfortunately, some participants reported that they had difficulty providing comments during the public hearings, and MTA apologizes for any technical difficulties experienced. MTA did provide assistance to the best of their ability to speakers who experienced difficulty during the virtual public hearings. In addition, the hearings were all posted online and remain there for the public to watch at their convenience. Finally, the public comment period remained open for approximately one month following the hearings, during which people could submit their comments in written or video format.

All comments submitted were reviewed and responses have been provided. To be as responsive as possible, this includes substantive comments received after the formal close of the comment period, while the Project Sponsors were still preparing responses to comments. The full set of comments made and responses to those comments are provided in **Appendix 18**.

OUTREACH TARGETED TO ENVIRONMENTAL JUSTICE POPULATIONS

Beyond the public and environmental justice meetings and hearings, the Project Sponsors also convened an Environmental Justice Technical Advisory Group (EJTAG) and an Environmental Justice Stakeholder Working Group (EJSWG), to provide a means for meaningful engagement on concerns related to members of environmental justice communities or populations. Members of the EJTAG include groups that work in the field of environmental justice and includes representation from New York, New Jersey, and Connecticut. The EJSWG was created to allow anyone who wanted to participate in more meaningful engagement to self-select or nominate someone else to participate. Three meetings of the EJSWG and five meetings of the EJTAG were held by early October 2022, with a sixth and seventh session of the EJTAG held in January 2023.

AGENCY COORDINATION

In advance of the public outreach meetings and the public hearings, agency executives in all 28 counties of the EA's regional study area were invited to participate in dialogue. The first regional agency meeting was held on September 20, 2021, and executives and/or staff were invited and/or participated from the New York State Department of Transportation, New York State Department of State, New York State Department of Environmental Conservation, New York City Department of Environmental Protection, New York City Mayor's Office, New York City Department of Parks and Recreation, Port Authority of New York and New Jersey (PANYNJ), New Jersey Turnpike Authority, NJ TRANSIT, North Jersey Transportation Planning Authority, Connecticut Department of Transportation, South Central Regional Council of Governments, Western Connecticut Council of Governments, Connecticut Metro Council of Governments, Delaware Valley Regional Planning Commission, and Dutchess and Orange Counties. As part of that session, the Project Sponsors walked through the planned presentation, requested feedback, and offered to answer

any questions. The second regional agency meeting was held on August 4, 2022, and the same agencies were invited and/or attended. After reviewing the presentation and the findings, the meeting was opened for comments and/or questions.

Comment 13: Please clarify the boundaries of the area where the CBD toll would apply, and which roads would and would not be excluded?

In April 2019, the New York State Legislature passed the Traffic Mobility Act, which established the boundaries of the tolling zone. The CBD Tolling Program would apply to the area of Manhattan south and inclusive of 60th Street, but not including the Franklin D. Roosevelt Drive (FDR Drive), the West Side Highway/Route 9A, the Battery Park Underpass, and any surface roadway portion of the Hugh L. Carey Tunnel connecting to West Street. All vehicles other than those that are exempt from the toll would be charged a toll when entering or remaining in that defined area. See the response to **Comment 14** for information on vehicles that remain in the Manhattan CBD.

In accordance with the legislation, other connections between the bridges and tunnels and the excluded roadways would be subject to the toll. This includes connections between the Ed Koch Queensboro Bridge and the FDR Drive, approaches to the Ed Koch Queensboro Bridge from areas north of 60th Street, and connections between the West Side Highway/Route 9A and the Holland and Lincoln Tunnels. It also includes connections between the residential area of Waterside Plaza and the FDR Drive and between Battery Park City and the West Side Highway/Route 9A. The limits of the CBD Tolling Program as well as the specific roadways excluded from the toll are defined in the Traffic Mobility Act. See also the response to **Comment 21**.

Some commenters proposed that the specific additional roadways be excluded, to allow free connections between the excluded roadways (i.e., the West Side Highway/Route 9A and the FDR Drive) and the tunnels and bridges that provide access to the Manhattan CBD. However, these connections are typically among the more congested locations in the Manhattan CBD, and excluding them would not contribute to reducing congestion in the Manhattan CBD and therefore make the Project less effective at meeting its purpose and need.

Comment 14: What does “remaining in” the Manhattan CBD mean?

All vehicles other than those that are exempt from the toll would be charged a toll when entering or remaining in the Manhattan CBD, as per the Traffic Mobility Act. Vehicles that remain in the Manhattan CBD are vehicles that are detected when leaving but were not detected entering in the same day. Given that they were detected leaving, they must have driven through the Manhattan CBD to get to the detection point, and therefore remained in it during a portion of the day. These vehicles would be charged that day for remaining in the Manhattan CBD.

Examples of how tolls would be applied for passenger vehicles include the following:

- If a passenger vehicle enters the Manhattan CBD on Monday morning and leaves Monday evening prior to midnight, it would be detected when it enters and when it leaves the Manhattan CBD. Because passenger vehicles would be charged only once daily, a single toll would be charged.
- If a passenger vehicle enters the Manhattan CBD on Monday and is parked until it leaves on Wednesday, it would be charged upon entering on Monday and for remaining when it drove through the Manhattan CBD on Wednesday to leave. This vehicle would not be charged when it was parked the full 24-hour period on Tuesday.
- If a passenger vehicle makes two round trips into the Manhattan CBD on the same day, it would be charged a single toll, because passenger vehicles would be charged only once daily.
- If a passenger vehicle is parked all week within the Manhattan CBD (for example, a vehicle owned by a resident of the Manhattan CBD) and then leaves the Manhattan CBD for a day trip on Saturday, the vehicle would be detected leaving (remaining) and re-entering the Manhattan CBD on the same day. Because passenger vehicles would be charged only once daily, a single toll would be charged on Saturday.
- If a passenger vehicle is parked all week within the Manhattan CBD (for example, a vehicle owned by a resident of the Manhattan CBD or a visitor to the Manhattan CBD) and then leaves the Manhattan CBD on Friday and returns on Monday, the vehicle would be identified as having remained on Friday since it was detected leaving; it would be identified as entering when it returns on Monday. It would receive a charge on Friday for remaining and on Monday for entering the Manhattan CBD. It would not be charged any other days when parked the entire day in the Manhattan CBD, nor the days when away.
- If a vehicle parked on the street within the Manhattan CBD is moved to the other side of the street for alternate-side-of-the-street parking regulations, it would not be charged for entering or remaining in the Manhattan CBD so long as it does not leave the CBD when circling the block or cross one of the detection zones when crossing the street. A vehicle would also not be charged a toll if it uses one of the excluded roadways (the West Side Highway/Route 9A or the FDR Drive) before re-entering south of 60th Street in Manhattan. Vehicles that cross 60th Street (and vehicles that leave through any of the bridges or tunnels before returning) to find another parking space would be charged.

For more information, see Chapter 2, “Project Alternatives,” of the EA.

Comment 15: What is the process for selecting the actual tolling structure?

If the Project is approved, the process to identify and select the actual toll schedule is specified in the Traffic Mobility Act and requires the following key steps: 1) Establishing a Traffic Mobility Review Board (TMRB) that would recommend a toll structure; and 2) adoption of the toll schedule by the TBTA Board in accordance with the State Administrative Procedure Act. These steps are described below, as well as the factors that the TMRB and TBTA would consider in recommending and adopting the final toll schedule. The text of the Traffic Mobility Act is provided in the EA in **Appendix 2B, “MTA Reform and Traffic Mobility Act.”**

TRAFFIC MOBILITY REVIEW BOARD (TMRB)

To help define the CBD Tolling Program, the Traffic Mobility Act requires the TBTA Board (the organization that oversees the TBTA) to establish a TMRB with a chair and five members representing the region who have experience in public finance, transportation, mass transit, or management. The legislation requires that one TMRB member should be a resident of the Metro-North service area and one should be a resident of the Long Island Rail Road service area; one member should be appointed by the Mayor of the City of New York. The TMRB shall operate according to Open Meetings Law and will hold meetings open to the public.

In July 2022, TBTA established the TMRB with the following members:

- Carl Weisbrod, Chair – Former Chairman of New York City Planning Commission and Director of New York City Department of City Planning; founding President of New York City Economic Development Corporation
- John Banks – Resident of Westchester County; President Emeritus of the Real Estate Board of New York; former Vice President of Government and Community Relations at Con Edison; former MTA Board member
- Scott Rechler – Resident of Long Island; current chair of Regional Plan Association and Chief Executive Officer and Chairman of RXR (investor and developer company); former Vice Chairman of Board of Commissioners for PANYNJ; former MTA Board member
- Elizabeth Velez – Current President of Velez Organization (construction services firm) and MTA Board member; former commissioner of New York City Property Tax Reform Commission
- Kathryn Wylde – Current President and CEO of Partnership for New York City; former Chairperson of Metropolitan Transportation Sustainability Advisory Workgroup
- John Samuelson – Appointed by the Mayor of New York City; current international president of the Transport Workers Union of America, AFL-CIO and non-voting member of MTA Board

The Traffic Mobility Act requires the TMRB to make a recommendation to the TBTA Board regarding the final toll structure for the CBD Tolling Program, including the toll amounts, which shall include a variable-pricing schedule and which shall not charge passenger vehicles more than once a day. The TMRB would also recommend a plan for credits, discounts, and/or exemptions for tolls paid on bridges and crossings, which would be informed by the results of the EA, which includes a traffic study associated with the impact of any such credits, discounts and/or exemptions on the recommended toll. The TMRB would also recommend a plan for credits, discounts, and/or exemptions for FHVs, based on factors including, but not limited to, initial market entry costs associated with licensing and regulation, comparative contribution to congestion in the Manhattan CBD, and general industry impact.

In making its recommendation, in addition to the goal of reducing traffic in the Manhattan CBD, the TMRB must ensure that, at a minimum, the annual net revenues of the CBD Tolling Program would provide funds adequate to fund \$15 billion for capital projects for the 2020–2024 Capital Program and any additional revenues above that amount should be available for successor programs.

TBTA ADOPTION OF TOLL SCHEDULE

Informed by the TMRB's recommendation, the TBTA Board would approve and adopt a final toll structure following a public hearing in accordance with the State Administrative Procedure Act (SAPA). SAPA also requires a minimum 60-day public comment period on the proposed toll structure regulation, which commences upon publication of a Notice of Proposed Rule Making attaching the proposed toll structure regulation in the *New York State Register*. If there is a substantive change made to the proposed toll structure regulation after its publication therein, an additional 45-day public comment period would take place on such amended proposed toll structure regulation prior to the TBTA Board's adoption of the final toll structure. The toll schedule must be adopted by the TBTA Board at least 30 days before the tolls are enacted as described in the Traffic Mobility Act.

TMRB AND TBTA CONSIDERATIONS FOR TOLL SCHEDULE

The TMRB's recommendation would be informed by the results of the EA, which includes a traffic study. The Traffic Mobility Act requires the TMRB to consider for purposes of its recommendations "factors including but not limited to, traffic patterns, traffic mitigation measures, operating costs, public impact, public safety, hardships, vehicle type, discounts for motorcycles, peak and off-peak rates and environmental impacts, including but not limited to air quality and emissions trends."

The TBTA Board's decision would be informed by the EA, recommendations from the TMRB, and comments received during the public hearing on the final toll structure that would be held in accordance with the State Administrative Procedure Act.

Since the final toll structure has not yet been identified, FHWA and the Project Sponsors evaluated a range of tolling scenarios with different toll prices, crossing credits, exemptions, and discounts, to identify the range of potential effects that could occur from implementing the Project. The specific toll schedule structure, including toll price, crossing credits, and exemptions, may differ from those tolling scenarios. The analyses in the EA afford an understanding of how, if warranted, the toll schedule can be structured to avoid adverse effects or, if they cannot be avoided, to provide for their mitigation. If the TBTA Board adopts a toll schedule structure that has substantially different attributes from those examined in the EA, the Project Sponsors would review these changes with FHWA and other resource agencies, as appropriate, and identify a course of action to assess and document the changes in accordance with NEPA prior to implementation of the Project.

Commenters provided specific recommendations on individual elements that may be incorporated into the adopted toll schedule. The TMRB would consider these suggestions before making its recommendation to the TBTA Board.

Comment 16: How were the toll amounts determined, will they vary, and are they final?

Toll amounts have not yet been determined and therefore multiple scenarios with differing toll rates were analyzed in the EA to explore the range of effects that could occur with the CBD Tolling Alternative. To help define the CBD Tolling Program, the Traffic Mobility Act required the TBTA Board to establish a TMRB with six members representing the region who have experience in public finance, transportation, mass transit,

or management. The TMRB would recommend to the TBTA Board the toll amounts and toll structure, such as crossing credits, discounts, and/or exemptions for existing tolls paid on bridges and tunnels. Informed by the TMRB's recommendation, the TBTA Board would approve and adopt a final toll structure following a public hearing in accordance with the State Administrative Procedure Act. The adopted TBTA plan would specify any crossing credits, discounts, and/or exemptions for tolls paid on bridges and tunnels; credits, discounts, and/or exemptions for taxis and/or FHV; and any other additional potential crossing credits, discounts, and/or exemptions. For more information, see the response to **Comment 15**.

Since the final toll schedule has not been determined, the EA included evaluation of multiple tolling scenarios within the CBD Tolling Alternative to identify the range of potential effects that could occur from implementing the Project. The tolling scenarios vary in their assumptions about the amount of the toll for different types of vehicles, the times tolls would be imposed, exemptions from tolling, crossing credits for tolls paid on other toll tunnels or bridges, and discounts in the form of "caps" (i.e., limits) on the number of tolls per 24-hour period to be applied to different types of vehicles. The actual toll structure may be a combination of these scenarios or a scenario with different or similar features, but not exactly the same as one of the tolling scenarios in the EA. See the response to **Comment 39** for information on commitments the Project Sponsors have made for the Final EA related to the final toll structure.

To meet the Project objective of creating a funding source for capital improvements and generating sufficient net revenues to fund \$15 billion for MTA capital projects, tolling scenarios that provide crossing credits, discounts, and/or exemptions would have a higher toll than those without these elements.

As required by the Traffic Mobility Act and FHWA's VPPP, the proposed tolling program would have a variable toll amount. The details of that variation have not been determined and would be included in the final tolling structure. The Project Sponsors anticipate that the tolls would vary by time of day, so that higher tolls would be charged during peak periods when congestion is greater. Specific peak periods have not yet been finalized and would be determined when the final tolling structure is established. See the response to **Comment 39** for information on commitments the Project Sponsors have made for the Final EA related to the final toll structure.

The peak periods assumed for the tolling scenarios evaluated in the EA are based on observed congestion patterns for the Manhattan CBD. Congestion in the Manhattan CBD typically begins in the early morning and lasts until past 8:00 p.m. Weekday traffic flows decline quickly during the 10:00 p.m. hour until reaching a low in the 3:00 a.m. hour. **Chapter 1, "Introduction,"** of the EA presents information on typical traffic flows into and out of the Manhattan CBD. As part of mitigation for other topics, TBTA has committed to ensuring that the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final CBD toll structure.

For more information on the tolling scenarios evaluated, see the EA, **Chapter 2, "Project Alternatives," Section 2.4.2.4,** and **Appendix 2E, "Project Alternatives: Definition of Tolling Scenarios."**

Comment 17: Does the Program include incentives for trucks to make deliveries during off-peak and overnight periods or to discourage trucks from diverting to avoid the Manhattan CBD?

The Project Sponsors favor off-hour deliveries for trucks as a component of the CBD Tolling Program, to reduce adverse effects related to truck traffic. As required by the Traffic Mobility Act, the CBD Tolling Program would include variable tolling, in which the toll amount would be lower during periods with lower congestion and higher during peak periods when congestion is greater. This would encourage trucks to shift to off-peak periods for their deliveries, which would help to reduce peak-period congestion in the Manhattan CBD. In addition, for the Final EA, the Project Sponsors have added two new mitigation commitments to incentivize off-peak truck deliveries and reduce the number of trucks that divert around the Manhattan CBD: 1) a commitment to further reduce overnight toll rates; and 2) a commitment to expand NYCDOT's Off-Hours Delivery Program, a pilot program that provides support for businesses that shift their deliveries to off-peak periods (see response to **Comment 39**).

To allow the Project Sponsors to evaluate the effects of variable tolls, the tolling scenarios in the EA have lower toll costs for overnight travel, which would incentivize overnight deliveries. In all tolling scenarios evaluated, the number of daily truck trips passing through the Manhattan CBD would decrease, as trucks without an origin or destination in the Manhattan CBD divert around the area. This decrease would range, depending on the tolling scenario, from 21 percent (about 1,700 truck trips) in Tolling Scenario G, which has the lowest overnight truck toll, to 81 percent (almost 6,800 truck trips) in Tolling Scenario F, with the highest overnight truck toll (see **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling,"** of the EA, **Table 4A-22, "Average Daily Truck Trips through the Manhattan CBD: No Action Alternative and Tolling Scenarios"**). The Project Sponsors evaluated Tolling Scenario G specifically to understand the effects of lower overnight truck tolls. This tolling scenario has the lowest truck tolls of the scenarios presented in the EA (this scenario has the same toll rates for all vehicle classes, including trucks, ranging from \$7 overnight to \$17 in the peak period). Tolling Scenario G would result in the fewest truck trips diversions around the Manhattan CBD, demonstrating the relationship between toll price and truck diversions. Tolling Scenarios B and F include caps on the number of tolls a truck driver would pay per day. However, the truck toll under Tolling Scenarios B and F is higher than under Tolling Scenario G, resulting in a greater number of truck trips diverted around the Manhattan CBD. **Table 18A-2** provides a summary of the truck toll rates for the tolling scenarios evaluated. See the EA, **Appendix 2E, "Definition of Tolling Scenarios,"** for more information on the tolling scenarios.

The Project Sponsors also evaluated the concept of shifting truck deliveries to off-peak hours in lieu of the proposed CBD toll, as a potential alternative for congestion reduction. This analysis concluded that shifting trucks to off-hour deliveries would not be sufficient on its own to meet the goals of the Project. For more information, see the response to **Comment 2**.

Table 18A-2. Tolling Scenarios Evaluated in the Environmental Assessment: Toll Rates Considered

TOLL PERIOD	SCENARIO A	SCENARIO B ⁴	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
	Base Plan	Base Plan with Caps and Exemptions	Low Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	High Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD	High Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	Base Plan with Same Tolls for All Vehicle Classes
Off-Peak Toll							
Weekday Off-Peak Hours	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	10 a.m. to 4 p.m.	8 p.m. to 10 p.m.
Off-Peak Auto E-ZPass Rate	\$6.90	\$7.61	\$10.50	\$14.27	\$17.25	\$17.25	\$8.70
Off-Peak Auto Tolls by Mail Rate	\$10.35	\$11.42	\$15.75	\$21.40	\$25.88	\$25.88	\$12.15
Off-Peak Small Truck E-ZPass Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$48.75	\$8.70
Off-Peak Small Truck Tolls by Mail Rate	\$20.70	\$22.84	\$31.50	\$42.80	\$51.75	\$63.75	\$12.15
Off-Peak Large Truck E-ZPass Rate	\$20.70	\$22.84	\$31.50	\$42.80	\$51.75	\$61.50	\$8.70
Off-Peak Large Truck Tolls by Mail Rate	\$31.05	\$34.26	\$47.25	\$64.19	\$77.63	\$78.75	\$12.15
Peak Toll							
Weekday Peak Hours	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 10 a.m.; 4 p.m. to 8 p.m.	6 a.m. to 8 p.m.
Weekend Peak Hours	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.
Peak Auto E-ZPass Rate	\$9.20	\$10.15	\$14.00	\$19.02	\$23.00	\$23.00	\$11.60
Peak Auto Tolls by Mail Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$34.50	\$16.20
Peak Small Truck E-ZPass Rate	\$18.40	\$20.30	\$28.00	\$38.04	\$46.00	\$65.00	\$11.60
Peak Small Truck Tolls by Mail Rate	\$27.60	\$30.45	\$42.00	\$57.06	\$69.00	\$85.00	\$16.20
Peak Large Truck E-ZPass Rate	\$27.60	\$30.45	\$42.00	\$57.06	\$69.00	\$82.00	\$11.60
Peak Large Truck Tolls by Mail Rate	\$41.40	\$45.68	\$63.00	\$85.59	\$103.50	\$105.00	\$16.20
Overnight Toll							
Weekday Overnight Hours	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	8 p.m. to 6 a.m.	10 p.m. to 6 a.m.
Weekend Overnight Hours	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.
Overnight Auto E-ZPass Rate	\$4.60	\$5.08	\$7.00	\$9.51	\$11.50	\$11.50	\$6.96
Overnight Auto Tolls by Mail Rate	\$6.90	\$7.61	\$10.50	\$14.27	\$17.25	\$17.25	\$9.72
Overnight Small Truck E-ZPass Rate	\$9.20	\$10.15	\$14.00	\$19.02	\$23.00	\$32.50	\$6.96
Overnight Small Truck Tolls by Mail Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$42.50	\$9.72
Overnight Large Truck E-ZPass Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$41.00	\$6.96
Overnight Large Truck Tolls by Mail Rate	\$20.70	\$22.84	\$31.50	\$42.80	\$51.75	\$52.50	\$9.72

Comment 18: Will there be any exemptions, discounts, or crossing credits?

At this time, the actual toll schedule, including exemptions, discounts, and crossing credits, has not been finalized. The EA explores the range of effects that could result from the CBD Tolling Program, including the effects related to exemptions, discounts, and crossing credits. In exploring these, the EA modeling provides seven scenarios, some of which provide exemptions and/or discounts in the form of caps on the number of times per day a vehicle may be tolled for certain types of vehicles, including taxis, FHVs, and buses. Several of the EA scenarios also provide for crossing credits for tolls paid at other toll facilities. Importantly, the more vehicles that receive crossing credits, discounts, and exemptions, the higher the toll must be to ensure sufficient revenues are generated to meet the Project's revenue target. At the same time, however, depending on the combination of toll cost and other variables such as crossing credits, a higher toll can result in more diverted traffic to highways that bypass the Manhattan CBD and thereby cause potential effects on the environmental justice populations that live near these highways. Please see the response to **Comment 15** for information on how the final toll schedule would be selected, including any exemptions, discounts, or crossing credits.

As described in **Chapter 4A, "Regional Transportation Effects and Modeling,"** to better understand the distribution of toll revenue (burdens) and CBD trips (benefits) by geography, an analysis was conducted that quantified the share of revenues paid by drivers from different geographies versus the share of trips made to the Manhattan CBD from each of those same geographies. This analysis was conducted using results from the 2023 BPM Tolling Scenarios A through G and is reproduced here as **Table 18A-3**. Each cell contains the percentage of total net revenue paid by drivers from a particular geography and the percentage of total trips to the Manhattan CBD made by drivers from that geography. For example, in Tolling Scenario A, Bronx drivers would pay 6.2 percent of total net revenue and would make 6.6 percent of total CBD vehicle trips. As illustrated in the table, the percentages of CBD toll revenue and trips tend to be more balanced for tolling scenarios that do not offer crossing credits (Tolling Scenarios A, B, and G), while the percentages tend to diverge for tolling scenarios that offer crossing credits (Tolling Scenarios C, D, E, and F).

The following discussion describes how exemptions, discounts, or crossing credits would be determined for the final toll schedule. Please also see the response to **Comment 39** for information on commitments the Project Sponsors have made for the Final EA related to the final toll structure.

Table 18A-3. Projected Percentage of Total Revenue/Percentage of Total Trips

GEOGRAPHY	SCENARIO A	SCENARIO B	SCENARIO C	SCENARIO D	SCENARIO E	SCENARIO F	SCENARIO G
New York (Manhattan)	13.5% / 14.0%	13.0% / 13.5%	15.7% / 13.6%	19.6% / 12.5%	17.9% / 12.4%	20.0% / 12.5%	13.1% / 13.5%
Kings (Brooklyn)	19.0% / 17.9%	18.9% / 17.8%	20.3% / 18.7%	17.1% / 16.5%	17.1% / 16.7%	17.5% / 16.5%	19.1% / 18.0%
Queens	17.9% / 16.4%	18.1% / 16.6%	17.7% / 17.6%	15.8% / 16.4%	16.6% / 16.5%	16.4% / 16.1%	18.2% / 16.7%
Bronx	6.2% / 6.6%	6.2% / 6.7%	7.9% / 7.1%	9.9% / 6.6%	9.1% / 6.6%	10.2% / 6.6%	6.3% / 6.8%
Richmond (Staten Island)	1.6% / 1.6%	1.6% / 1.5%	1.7% / 1.8%	1.1% / 1.7%	1.4% / 1.8%	1.4% / 1.7%	1.6% / 1.6%
Long Island	7.6% / 6.8%	7.7% / 6.9%	7.2% / 7.0%	6.3% / 6.7%	6.8% / 6.8%	6.3% / 6.6%	7.7% / 6.9%
Hudson Valley	6.6% / 7.1%	6.6% / 7.2%	8.4% / 7.7%	10.4% / 7.1%	9.4% / 7.1%	10.8% / 7.2%	6.6% / 7.1%
New Jersey	17.7% / 20.0%	17.8% / 20.0%	11.6% / 16.5%	10.0% / 21.9%	11.8% / 21.4%	7.8% / 21.9%	17.5% / 19.6%
Connecticut	2.4% / 2.5%	2.4% / 2.6%	3.1% / 2.8%	4.0% / 2.6%	3.5% / 2.5%	4.1% / 2.6%	2.4% / 2.6%
Other	7.5% / 7.2%	7.5% / 7.3%	6.4% / 7.1%	5.8% / 8.1%	6.5% / 8.4%	5.5% / 8.3%	7.4% / 7.2%

Note: Revenue includes only projected CBD toll revenue. Other existing TBTA and PANYNJ tolls, including those on crossings leading directly to or from the Manhattan CBD, are not included in the revenue calculations.

TRAFFIC MOBILITY ACT

Consistent with the Traffic Mobility Act, passenger vehicles would be tolled no more than once per day. The Traffic Mobility Act also provides exemptions for: 1) qualifying authorized emergency vehicles;¹⁹ and 2) qualifying vehicles transporting persons with disabilities. Qualifying vehicles transporting persons with disabilities include vehicles with government-issued disability license plates and fleet vehicles owned or operated by organizations and used exclusively to provide transportation to people with disabilities. The Traffic Mobility Act also requires a New York State tax credit for CBD tolls paid by residents of the Manhattan CBD with annual adjusted gross incomes below \$60,000. Other potential caps, exemptions, discounts, and crossing credits were modeled in the tolling scenarios for the CBD Tolling Alternative, including but not limited to exemptions and caps for buses, taxis, and FHV's, but a decision on these would be made separately by the TBTA Board as informed by a recommendation from the TMRB. See response to **Comment 15** for more information. In addition, see the response to **Comment 39** for information on commitments the Project Sponsors have made for the Final EA related to the final toll structure.

THE ROLE OF THE TMRB IN CONSIDERING DISCOUNTS AND EXEMPTIONS

The TMRB would recommend to the TBTA Board a toll structure, including any crossing credits, discounts, and/or exemptions for existing tolls paid on bridges and tunnels. Informed by the TMRB's recommendation, the TBTA Board would approve and adopt a final toll structure following a public hearing in accordance with the State Administrative Procedure Act. The adopted TBTA plan would specify any crossing credits, discounts, and/or exemptions for tolls paid on bridges and tunnels; credits, discounts, and/or exemptions for taxis and/or FHV's; and any other additional potential crossing credits, discounts, and/or exemptions.

DISCOUNTS AND EXEMPTIONS PROPOSED BY COMMENTERS

The Project Sponsors would make the TMRB aware of the various requests for discounts (through toll credits) and exemptions made during the comment period. These include the following:

1. Artists
2. Auto commuters from New Jersey
3. Auto commuters from Orange County (NY)
4. Auto commuters from Rockland County (NY)
5. Auto commuters from Staten Island
6. Black cars
7. Buses
8. Buses – Commuter
9. Buses – Interstate
10. Buses – MTA
11. Buses – Private carriers

¹⁹ As defined in the Consolidated Laws of the State of New York, Vehicle and Traffic Law, Title 1, Article 1 Section 101, authorized emergency vehicles consist of every ambulance, police vehicle or bicycle, correction vehicle, fire vehicle, civil defense emergency vehicle, emergency ambulance service vehicle, blood delivery vehicle, county emergency medical services vehicle, environmental emergency response vehicle, sanitation patrol vehicle, hazardous materials emergency vehicle and ordnance disposal vehicle of the armed forces of the United States.

12. Buses – Private carriers providing transit/commuter service
13. Buses – School
14. Buses – Transit
15. Caretakers
16. Carpoolers
17. Civil servants
18. Community service providers that provide service in Manhattan Community District 3
19. Drivers – Infrequent
20. Drivers – New York State-registered plates with a Manhattan CBD zip code
21. Drivers – New York State-registered plates in Manhattan
22. Drivers – New York State-registered plates in New York City
23. Drivers – Staten Island
24. Farmers
25. Federal law enforcement agencies
26. First responders
27. FHV's
28. FHV's – licensed by the New York City TLC
29. FHV's – wheelchair-accessible (regardless of whether being used for disabilities)
30. Government vendors (e.g., Outfront, a contractor for MTA)
31. Low-income drivers
32. Low-income immigrants
33. Low-income residents
34. Medical patients
35. Members – International Union of Operating Engineers
36. Musicians
37. Non-emergency medical transport (which is an expense covered by health insurance)
38. Parents
39. Persons attending religious services
40. Persons of color
41. Persons on fixed incomes
42. Persons with disabilities (in addition to vehicles transporting them)
43. Persons with major financial constraints
44. Residents – Brooklyn
45. Residents – Manhattan CBD
46. Residents – Manhattan CBD, but make it temporary and phase it out
47. Residents – Manhattan CBD, who garage their vehicles
48. Residents – Manhattan CBD, with household incomes at or below 120 percent of Area Median Income (\$147,500)
49. Residents – Manhattan CBD, with household incomes at or below the Area Median Income (\$67,046)
50. Residents – Manhattan CBD, with household incomes less than \$150,000
51. Residents – Manhattan CBD, with individual income less than \$100,300
52. Residents – Long Island, battling cancer, 9/11-related illness, and other serious diseases

Appendix 18A: Responses to Frequently Received Comments

53. Residents – Manhattan
54. Residents – Manhattan Community District 3
55. Residents – New York City
56. Residents – New York State
57. Residents – New York State, with incomes less than \$60,000
58. Residents – Orange County
59. Residents – Rockland County
60. Residents – Staten Island
61. Residents – Waterside Plaza
62. Retirees – NYPD
63. Retirees – NYPD detectives
64. Reverse commuters living in the Manhattan CBD
65. Senior citizens
66. Small business owners
67. Students – City University of New York
68. Students – receiving special education
69. Taxis
70. Taxis – licensed by the TLC
71. Taxis – wheelchair-accessible (regardless of whether being used for disabilities)
72. Taxis – yellow
73. Vehicles – agricultural transporting farm products
74. Vehicles – American Red Cross, dispatched from within the Manhattan CBD
75. Vehicles – Con Edison
76. Vehicles – construction
77. Vehicles – delivery
78. Vehicles – diplomatic license plates
79. Vehicles – electric
80. Vehicles – emergency
81. Vehicles – emergency roadside
82. Vehicles – food delivery
83. Vehicles – food delivery, fruits and vegetables to Manhattan Community District 3
84. Vehicles – food delivery to the homebound (Coalition for the Homeless, Encore, God’s Love We Deliver)
85. Vehicles – fuel delivery
86. Vehicles – hearses
87. Vehicles – high-occupancy
88. Vehicles – mopeds and scooters
89. Vehicles – motorcycles
90. Vehicles – noncommercial
91. Vehicles – nonprofits
92. Vehicles – passenger cars
93. Vehicles – providing social services

94. Vehicles – required for heavy work equipment
95. Vehicles – student transport for Fordham University
96. Vehicles – tow trucks
97. Vehicles – transporting medications to pharmacies in Manhattan Community District 3
98. Vehicles – trucks
99. Vehicles – using parking garages in the Manhattan CBD (daily or monthly)
100. Vehicles – whose manufacturers participate in the “circular economy”
101. Veterans
102. Workers – City
103. Workers – construction
104. Workers – detectives
105. Workers – detectives, NYPD
106. Workers – doctors
107. Workers – essential
108. Workers – FDNY/EMS
109. Workers – health care
110. Workers – hospital
111. Workers – judges
112. Workers – nurses
113. Workers – NYPD members
114. Workers – overnight
115. Workers – pharmacists
116. Workers – service delivery
117. Workers – teachers
118. Workers – teachers, only New York City Department of Education (not Charter schools)
119. Workers – trades (e.g., electricians, plumbers, HVAC technicians)
120. Workers – waste and recycling industry
121. Working-class families
122. Working-class immigrants

REQUESTS FOR EXEMPTIONS THAT SHOULD NOT BE INCLUDED

Many commenters, while expressing support for the CBD Tolling Program, also proposed that there be no exemptions at all beyond what is provided in the Traffic Mobility Act, or proposed that various types of vehicles or drivers should not be exempt from the toll. These include requests that no exemptions be provided for the following:

Broadly

1. Any beyond what is in the legislation
2. Any based on arbitrary classifications
3. Any based on employment type
4. Any but emergency response, Access-A-Ride, and MTA buses
5. Any but vehicles with handicap permits

Appendix 18A: Responses to Frequently Received Comments

6. Any but disabled drivers
7. Any but yellow medallion taxis and FHVs
8. Any within the first two years of the program

Businesses

1. Large delivery companies (FedEx, Amazon)
2. Transportation Network Companies (TNCs)
3. Uber/Lyft/Via and other commercial limousine services and ridesharing companies

Drivers

1. Entering New York City through a tolled bridge or tunnel
2. From New Jersey

Residents

1. Low-income
2. Manhattan CBD residents
3. New Jersey residents
4. New York City residents
5. Out-of-state residents
6. Various racial and ethnic groups

Vehicles

1. Bicycles
2. Buses – sightseeing
3. Car services and FHVs (Uber, Lyft, ride-sharing app services)
4. City vehicles
5. City department/agency vehicles
6. Delivery (FedEx, Amazon)
7. Motorcycles
8. MTA vehicles
9. Personal vehicles
10. Personal vehicles – belonging to cops
11. Personal vehicles – belonging to firefighters
12. Personal vehicles – belonging to City and MTA administrators
13. Private
14. Private – driven by City employees, FDNY, NYPD, or other City agencies
15. Personal vehicles
16. Scooters
17. Trucks
18. Taxis
19. Vehicles – electric or hybrid
20. Vehicles – out-of-state plates

Workers

1. All workers
2. City of New York employees
3. Charter school employees

4. DSNY (Department of Sanitation of New York) employees
5. FDNY employees
6. Federal employees
7. Government employees
8. MTA employees
9. NYPD officers
10. NYPD officers living outside of New York City
11. People with parking placards
12. Police
13. Public-sector employees
14. State employees
15. Teachers

PROPOSALS FOR ROADWAYS THAT SHOULD BE EXCLUDED FROM THE TOLL

Some commenters requested that specific roadways within the area defined as the Manhattan CBD be exempt from the toll, to allow connections to and from highway segments that would be exempt. These include the following:

1. Ed Koch Queensboro Bridge – approaches from the FDR Drive and from areas north of the Manhattan CBD
2. East River bridges (Ed Koch Queensboro Bridge, Williamsburg Bridge, Manhattan Bridge, Brooklyn Bridge) – connections to and from the FDR Drive
3. Holland Tunnel – connections to and from the West Side Highway/Route 9A
4. Lincoln Tunnel – connections to and from the West Side Highway/Route 9A
5. Waterside Plaza – connections to and from the FDR Drive

Comment 13 provides more information on the definition of the Manhattan CBD, which does not provide exemptions for these roadways and connections.

Comment 19: How will the exemption for vehicles transporting persons with disabilities work?

Qualifying vehicles transporting persons with disabilities would be exempt from the toll. Qualifying vehicles transporting persons with disabilities would include vehicles with government-issued disability license plates and fleet vehicles owned or operated by public or private organizations that are used exclusively to transport people with disabilities.

The exemption for vehicles transporting people with disabilities would work in several ways. First, the tolling technology would be used to exempt from the CBD Tolling Program any passenger vehicle with a disability license plate, provided the vehicle's registration is in good standing. Second, public and private organizations, regardless of their location, that transport persons with disabilities (e.g., Access-A-Ride, ambulette service providers, etc.) would register to receive an Organizational Disability E-ZPass Plan (ODEP) so that their qualifying vehicles would not be charged when using E-ZPass tags linked to an ODEP. Finally, TBTA would work with Access-A-Ride, MTA's paratransit service provider, and the New York City Taxi and

Limousine Commission so that taxis and other types of vehicles that are used for qualifying trips are not charged when making such trips using their E-ZPass linked to an ODEP.

Recognizing the interest in a disability exemption for individuals who may not use qualifying vehicles, TBTA reviewed existing benefits and transportation alternatives for persons with disabilities, potential means for credentialing individuals rather than organizations, potential operational impacts to the Project, and the potential for fraudulent use and ability to audit the Project. TBTA found that the term “disability” is broad and may or may not denote the ability of an individual to use public transportation. It also found that many credentials that could be used for individual qualification do not distinguish those who could use transit from those who cannot. Furthermore, individuals with disabilities (especially those who are low-income) may have access to benefits that allow for low- or no-cost transportation. Thus, it was determined that exempting public and private organizations that have qualifying vehicles transporting persons with disabilities and exempting vehicles with state-issued disability license plates meets the legislative requirements without imposing an undue burden or cost on the operation of the CBD Tolling Program.

In addition, MTA offers reduced fare passes for individuals with disabilities. People over the age of 65 or with a qualifying disability receive a reduced fare on MTA subways and buses. In addition, people with disabilities can also use MTA’s paratransit service, the Access-A-Ride Program. This program operates in New York City and in nearby areas of Nassau and Westchester Counties. It includes a shared-ride program and origin-to-destination service for eligible customers or feeder service (to and from public transportation) for others. The Access-A-Ride program operates 24 hours a day, 7 days a week, every day of the year. Private carriers under contract to MTA provide this service by lift-equipped vans, ramp-equipped vehicles or sedans. In addition, service is provided by taxis and FHVs operating on behalf of MTA to transport paratransit users.

In New York north of New York City and on Long Island, Rockland, Orange, Dutchess, Putnam, Westchester, Nassau, and Suffolk counties also offer a combination of accessible buses and demand-responsive paratransit services.

Similarly, NJ TRANSIT has a reduced fare program that offers special rates on NJ TRANSIT buses and trains for residents 62 years of age or older and people with disabilities. NJ TRANSIT also offers paratransit service through its Access Link program. Additionally, all 21 counties in New Jersey also provide paratransit service. More information can be found on the State of New Jersey Department of Human Services website (<https://www.state.nj.us/humanservices/dds/hottopics/transportation/>).

In New Haven and Fairfield counties in Connecticut, CTtransit, Greater Bridgeport Transit District, and Norwalk Transit District offer reduced bus fares for the elderly and people with disabilities and demand-responsive paratransit service is also available. More information can be found on the Connecticut Department of Transportation website (<https://portal.ct.gov/DOT/Publictrans/Bureau-of-Public-Transportation/Paratransit-service>).

Building an accessible transit system for all New Yorkers is a key tenet of MTA’s 2020–2024 Capital Program. All MTA buses are fully ADA-accessible. There are more than 140 subway stations that are accessible in

accordance with the Americans with Disabilities Act (ADA). Information on stations that are accessible is available on MTA's website (<https://new.mta.info/accessibility/stations>) and via MTA's subway map that highlights accessible stations (<https://new.mta.info/map/5346>). The website and map both highlight whether a station complex (i.e., a group of interconnected subway stations, such as Union Square) is only accessible in some parts or if a station is only accessible in one direction. Making every station in the system accessible is a top priority for MTA and work on ADA-accessible stations is under way in every borough. For more information on improvements to the MTA system to make it ADA-accessible, see the response to Comment 24.

Comment 20: Will my car be subject to the toll on days when it is parked in a garage or on the street in the Manhattan CBD?

A car will not be subject to the toll if it is parked in a garage or on the street within the Manhattan CBD for the entire 24-hour period. Vehicles would not be charged for days that they are parked and do not enter or leave the Manhattan CBD (i.e., vehicles that are parked for the full 24 hours between 12:00 a.m. and 11:59 p.m. would not be tolled, as they were not contributing to congestion while parked). Section 2.4.2 of Chapter 2, "Project Alternatives," of the EA provides additional description of how vehicles would be tolled. See also the response to Comment 14.

Comment 21: I drive infrequently or for short distances when I enter or leave the Manhattan CBD. I do not contribute to congestion, so why should I pay the new toll?

All vehicles that are driven into or out of the Manhattan CBD collectively contribute to congestion, even when each individual vehicle does so only infrequently or for short distances. Although infrequent trips may be made into the Manhattan CBD, these trips still contribute to traffic congestion. The less often you drive into the Manhattan CBD, the less often you would be charged. Moreover, the roadways that connect to entry/exit points for the Manhattan CBD are typically among the more congested locations in the Manhattan CBD, so vehicles using these points to enter and exit do contribute to congestion in the Manhattan CBD.

Comment 22: Why should I pay an extra toll to enter the Manhattan CBD when I already pay a toll at a bridge or tunnel?

Existing tolls at TBTA and PANYNJ facilities are used for a number of purposes, including funding mass transit. TBTA toll revenue is used for ongoing operating expenses and surplus revenue is used to help support MTA public transit services. The existing TBTA toll revenue is insufficient to meet the funding needs for MTA's 2020-2024 Capital Program. PANYNJ collects revenue from multiple operations, including: tunnels, bridges and terminals; aviation; ports; PATH (rail); and real estate. The monies collected from all of these sources, including tolls at the tunnels and bridges, contribute to the PANYNJ's general operating revenue budget as well as to their capital budget. Tolls, in particular, also help subsidize operations at the Port Authority Bus Terminal.

Appendix 18A: Responses to Frequently Received Comments

At this time, the actual toll schedule, including exemptions, discounts, and crossing credits, has not been finalized (see response to **Comment 18**). The CBD Tolling Program could include credits for tolls paid at existing tolled tunnels that connect directly to the Manhattan CBD or credits for these facilities as well as tolls paid at tolled bridges connecting to Manhattan. If these are included, the crossing credits would more efficiently distribute traffic across the East River crossings by making the net toll amount paid by a driver at each crossing more similar. This would generally reduce VMT outside the Manhattan CBD and shift vehicles from local roads to the highway network. At the same time, the more vehicles that are given crossing credits and the higher the credit, the higher the CBD toll must be to ensure sufficient revenues are generated to meet the Project's revenue target. Drivers who choose to use a currently untolled East River crossing, or who enter the Manhattan CBD via the avenues that cross 60th Street, would pay a higher CBD toll under scenarios with crossing credits compared to scenarios without credits.

The Project Sponsors conducted an analysis of the effects of crossing credits in terms of the share of revenues paid by drivers from different geographies versus the share of trips made to the Manhattan CBD from each of those same geographies. That analysis (see **Table 4A-34** in **Subchapter 4A, "Transportation: Regional Effects and Modeling"**) shows that the percentages of CBD toll revenue and trips tend to be more balanced for tolling scenarios that do not offer crossing credits, while the percentages tend to diverge for tolling scenarios that offer crossing credits. As crossing credits are added, drivers from New Jersey and Queens would pay less for the CBD toll and drivers from Brooklyn and areas north of the Manhattan CBD would tend to pay more, although the differences would converge when considering overall tolls paid to enter the Manhattan CBD.

In addition, depending on the combination of toll cost and other variables such as crossing credits, a higher toll can result in more diverted traffic to highways that bypass the Manhattan CBD and potential adverse effects on environmental justice populations that live near these highways.

Comment 23: How will this Project be fair for drivers who cannot reasonably use public transportation, and therefore won't have a reasonable alternative to paying the new toll?

The majority of people who currently travel to the Manhattan CBD use public transportation. For work trips, approximately 85 percent of workers who commute to the Manhattan CBD take public transportation to travel to work and 11 percent drive to work. The remaining 4 percent travel by bicycle, walking, motorcycle, and taxi and FHV. This level of commuting by public transportation is much higher than in the United States overall, where most people commute to work by car. Indeed, the New York City metropolitan area has an extensive public transportation system covering a wide area, and within New York City, subway service operates 24 hours a day, 7 days a week. With the proposed new toll, people who currently drive to the Manhattan CBD have several options, which will vary in their feasibility and desirability among drivers. They include, but are not limited to, the following:

- Continue to drive and pay the toll.
- Switch modes to a non-vehicular option(s) to avoid the toll.

- Shift the time of trips to when lower off-peak and overnight toll rates are in effect.
- Carpool or rideshare and pay and share the cost of the toll.
- Telecommute, or telecommute more often, to eliminate or reduce the frequency of incurring the toll.
- Seek new employment opportunities (or other workplace locations with the same employer) at location(s) that would not involve incurring the toll.
- Relocate their place of residence to a location within the Manhattan CBD or to a location closer to transit.

For people who continue to drive and pay the toll, the cost of their trip would increase. As shown in **Figure 4A-3 in Subchapter 4A, "Transportation: Regional Effects and Modeling,"** the total trip costs incurred by individuals driving to the Manhattan CBD would vary widely, depending on individual circumstances (including route choice and whether other, non-CBD tolls are paid) and the final tolling schedule implemented (including exemptions and crossing credits). See the response to **Comment 39** for information on commitments the Project Sponsors have made for the Final EA related to the final toll structure. The frequency and feasibility of this option for individuals would depend on several factors, such as the cost of the toll, their wages and salary, and the availability of non-vehicular commute options near their places of work and residence. The CBD Tolling Program would also result in beneficial effects for people who continue to drive, as a result of the overall reduction in VMT in the region and enhanced mobility that would result from reduced congestion. The Project would address the demonstrated need to reduce vehicle congestion in the Manhattan CBD, which would benefit all drivers traveling to and near the Manhattan CBD, especially those who value their travel-time savings more than the toll cost. The reduced congestion would produce other related benefits in the Manhattan CBD, including travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety for vehicles, pedestrians, and bicyclists, and improved air quality in the Manhattan CBD and regionwide. For some drivers, this would potentially offset the negative effect of increasing the cost of driving to the Manhattan CBD.

As noted by commenters, some people would not choose to switch to public transportation for their trip. The EA (**Section 5A.4.2.5 in Subchapter 5A**) evaluates how many people do not currently have convenient access to public transportation options. All areas of New York City are within 1/2 mile of transit service, with the exception of one neighborhood in Queens (Breezy Point). Some small areas of New York City are within 1/2 mile of transit such as local bus service, but do not have direct access to faster transit modes (commuter rail, subway, or express bus/Select Bus Service (SBS)). Approximately 5,200 residents of these areas without faster transit access currently commute to the Manhattan CBD for work by car. Some of these commuters could choose to drive instead to a transit hub if parking is available there, and others could opt to use local bus service to access commuter rail, subway, or express bus/SBS service. Similarly, commuters from outside New York City could drive to a transit station to continue their trip to the Manhattan CBD. (Refer to response to **Comment 34** for more information about parking at transit stations.)

Some commenters noted that they are not comfortable using public transportation. Please see the response to **Comment 25** for information on initiatives MTA is undertaking to address safety in the subway system and response to **Comment 24** for other improvements currently under way in the transit system, including a major initiative to increase ADA accessibility in the subway system.

Appendix 18A: Responses to Frequently Received Comments

The EA includes an analysis of the effects of the new toll on low-income populations who drive in **Chapter 17, "Environmental Justice."** As discussed there, about 16,000 low-income people who work in the Manhattan CBD and currently travel by car. Roughly half of these would be eligible for existing transit or E-ZPass discounts to access the Manhattan CBD. While some of these drivers might switch to transit to avoid the new toll, others may not reasonably be able to do so, or may choose not to do so. The Final EA describes existing programs in place for low-income commuters and additional measures the Project Sponsors would take to reduce the financial impact on low-income drivers. See response to **Comment 37** for more information.

For discussion of effects on elderly people, see response to **Comment 29**. For discussion of effects on medical patients, see response to **Comment 30**.

People from three specific geographic areas—Rockland County, New Jersey, and Staten Island—commented that the CBD Tolling Program would be unfair to them, because they have few public transportation options to the Manhattan CBD. Residents of those areas, like residents of other areas throughout the New York metropolitan region, do have the option of driving to a public transportation hub so that they can complete their trip by transit. As further detailed in response to **Comment 4** and as specified in the Traffic Mobility Act, the revenue from the CBD Tolling Program would be allocated as follows: 1) 80 percent to New York City subways and buses (New York City Transit, Staten Island Rapid Transit Operating Authority, and MTA Bus Company); 2) 10 percent to Metro-North Railroad; and 3) 10 percent to Long Island Rail Road.

The CBD Tolling Program would improve travel conditions in Manhattan for all travelers to the Manhattan CBD by reducing peak-hour traffic entering and leaving the CBD. All vehicle operators in Manhattan would benefit from reduced travel times and reduced fuel consumption, which includes Rockland, New Jersey, and Staten Island drivers who visit and work in New York. Revenues invested in maintaining and enhancing NYCT buses and subways would also benefit those from Rockland, New Jersey, and Staten Island traveling throughout New York City via public transit.

The EA provides more information on the effects of the CBD Tolling Alternative on people who currently drive to the Manhattan CBD in **Subchapter 5A, "Social Conditions: Population Characteristics and Community Cohesion."** In addition, **Chapter 6, "Economic Conditions,"** evaluates the effects of the Project on people who drive to the Manhattan CBD for work. At this time, the actual toll schedule, including exemptions, discounts, and crossing credits, has not been finalized (see response to **Comment 18**).

Comment 24: Is MTA improving its transit system before implementing the CBD Tolling Program?

MTA regularly makes improvements to its transit system, including both capital improvements and ongoing operational improvements, as described below. The response to **Comment 25** provides additional information on initiatives MTA is taking to improve safety in its system.

CAPITAL IMPROVEMENTS

Beginning in 2017, MTA's operating agencies engaged in projects to address some of the root causes of declining service and implemented improvements to commuter rail and subway infrastructure. As documented in MTA's 2020–2024 Capital Program, these projects resulted in substantial reductions in delay and improvements in on-time performance. Notwithstanding these improvements, elements of MTA's commuter rail and subway system are more than 100 years old, and essential capital needs remain to ensure a state of good repair and to bring MTA's transit and rail assets into the 21st century. The MTA 2020–2024 Capital Program calls for extensive improvements throughout the MTA integrated transportation network.

MTA continues to make multi-million-dollar investments to expand and improve its system. These include the East Side Access Project to add Long Island Rail Road service to East Midtown in the Manhattan CBD, the construction of a third track on the Long Island Rail Road mainline between Floral Park and Hicksville, the introduction of Metro-North Railroad service to Penn Station via the Hell Gate Bridge with four new stations in the Bronx as part of Penn Station Access, the ongoing construction of the Second Avenue Subway, which will soon include three new stations in the East Harlem neighborhood of Manhattan, and proposals to renovate and expand Penn Station. When these projects are complete, MTA will substantially increase Long Island Rail Road service to Manhattan, provide new Metro-North Railroad service in areas not currently served by passenger rail, and substantially expand subway service available in East Harlem.

Projects are under way to address aging infrastructure, improve accessibility, and expand the system. MTA has an ongoing program to procure new commuter rail and subway cars as well as buses, including electric vehicles. MTA's station renewal program has and continues to carry over multiple capital programs to modernize commuter rail and subway stations throughout its network, addressing maintenance issues, improving communications technologies, addressing areas prone to crowding, and improving the overall passenger experience. MTA's Capital Program also addresses projects in its yards and depots to help maintain its fleet in good operating condition. Signal improvement projects, including Positive Train Control and Communications Based Train Control, would allow for faster, safer, and more reliable operations for commuter rail and subways.

MTA is working to increase ADA accessibility throughout its transit system. The MTA's 2020–2024 Capital Program has dedicated \$5.2 billion to making stations newly ADA-accessible and almost \$600 million to upgrading elevators to improve reliability. When these projects are finished, subway riders will never be more than two stops away from an accessible station. As of February 2023, 99 subway stations and 5 Staten Island Railway stations are fully ADA-accessible and another 15 subway stations are partially ADA-accessible.

Since 2020, MTA has improved 14 subway stations to make them ADA-accessible:

- 1 Ave (L)
- 59 St (N/R)
- 86 St (R)

Appendix 18A: Responses to Frequently Received Comments

- 170 St (4)
- Astoria Blvd (N/W)
- Ave H (Q)
- Bedford Ave (L)
- Bedford Park Blvd (B/D)
- Canarsie–Rockaway Pkwy (L)
- Chambers St (J/Z)
- Eastern Pkwy–Brooklyn Museum (2/3)
- Greenpoint Ave (G)
- Gun Hill Rd (5)
- Times Square Shuttle (S)

At these stations, MTA installed ADA-accessible elevators and, when not already present, tactile warning strips, automatic gates, and other ADA-accessible features.

MTA is committed to an ongoing program to upgrade subway stations to make them ADA accessible. The 2020–2024 Capital Program includes ADA upgrades at an additional 70 stations, and work is currently under way on additional station projects in every borough. A list of these station upgrade projects is available on MTA’s website (<https://new.mta.info/accessibility/travel/subway>).

As part of MTA’s ongoing initiative to achieve systemwide accessibility, MTA and the New York City Department of City Planning are collaborating through a recently enacted citywide revision to the city’s zoning regulations, “Zoning for Accessibility,” that provides incentives for private property owners to provide space in their development projects for elevators or other station access points. In addition, some station improvements will be completed through the Rapid Station Accessibility Upgrade program. MTA will work with a private partner who will be responsible for completing the work more quickly and at a lower cost than MTA. These partners will also be required to maintain the elevators for 15 years.

Existing funding sources are insufficient to fully implement the MTA 2020–2024 Capital Program and subsequent capital programs that are needed for subway, bus, and commuter rail services. The New York State Legislature passed the Traffic Mobility Act to provide stable and reliable funding to repair and revitalize the regional transit system. Consequently, providing that reliable funding source is a principal component of the purpose for the CBD Tolling Program. MTA cannot make all planned improvements to the subway system prior to implementation of the CBD Tolling Program because adequate funding is not available.

OPERATIONAL IMPROVEMENTS

MTA routinely evaluates its service plan and makes adjustments to accommodate changes in demand. MTA adjusts its commuter rail, subway, and bus schedules, as needed, multiple times per year.

MTA is undertaking a comprehensive evaluation of its bus network. MTA is coordinating with the City of New York to fulfill Mayor Eric Adams’ promised 150 miles of new bus lanes and busways. MTA is also

working to expand the use of automated cameras to keep these corridors clear of private cars and delivery trucks, which cause delays. By implementing transit signal priority, a technology which can advance or extend the green phase of a traffic signal to allow a bus to continue through, MTA can reduce the time buses spend sitting at red lights.

MTA is also preparing studies of the bus networks in each borough to evaluate the efficiency of current routes. The studies recommend network improvements to decrease travel times and make trips simpler for customers; improve connections between and within boroughs, increase frequencies to provide an all-day network to meet customer needs, and to balance stop spacing to speed up buses and improve reliability. As part of this initiative, MTA has implemented bus network redesign programs in Staten Island and the Bronx and is currently planning the programs for Queens and Brooklyn. Since implementation of the redesigns, bus speeds in Staten Island have increased by 5 percent on weekdays overall, with the AM peak weekdays speeds 9 percent faster. And on Bronx bus routes speeds are now the highest in the system, outperforming the systemwide average by 7 percent. Not only are customers reporting satisfaction with these changes, but the routes are also attracting new riders, with increased ridership on many of the changed routes.²⁰ MTA is also working with NYCDOT to implement Bus Priority Projects on targeted corridors to maximize the travel time savings and improve the quality of service for customers.

Comment 25: What is MTA doing to improve safety in its system?

Safety and security are a priority for MTA and transit remains one of the safest ways to get around New York City. In 2021, subway ridership totaled 760 million and bus ridership totaled 312 million, nearly 1.1 billion total. During that same period, there were 1,778 major felonies reported, or 0.0002 percent of total ridership. Nearly three-quarters (73 percent) of these were due to robberies (529), grand larceny (766), or burglaries (6).

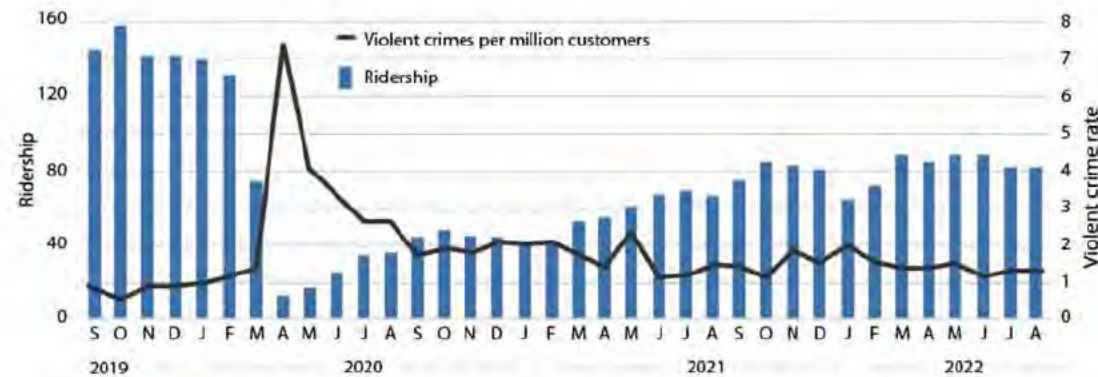
As of September 2022, customer assaults have been trending down and enforcement activity by the New York City Police Department (NYPD) has been increasing. **Figure 18A-1** illustrates recent trends in crime in the subway system and enforcement by NYPD.

²⁰ MTA NYCT analysis, 2022.

Figure 18A-1. Trends in Subway Crime and NYPD Enforcement, Pre-COVID vs. Post-COVID

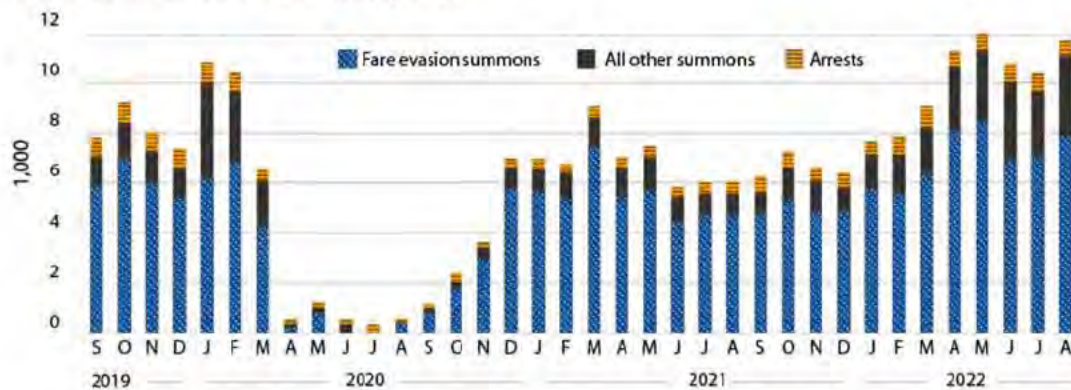
Violent Crimes Against Subway Customers

The rate of all major felonies (murder, rape, robbery, felony assault, grand larceny) against subway customers



NYPD Summonses & Arrests

The number of summonses issued for fare evasion (TABs + criminal); numbers of summonses issued for other infractions; and number of arrests made by NYPD



Moving forward, a number of initiatives are being undertaken in partnership with New York City Transit (NYCT) and NYPD. Among them:

- In September 2022, Governor Hochul announced that surveillance cameras would be installed in all subway cars.
- NYCT is actively adding additional cameras to the 10,000 already in place in subway stations, to further enhance coverage.
- NYPD uniformed train patrols are providing enhanced police presence, and communicating with train conductors and bus operators so that riders know police are present.
- MTA is engaged in discussions with District Attorneys across the city with the goal of achieving substantive outcomes from the arrests of recidivists and those committing sex crimes or employee assaults.

- MTA is launching a new initiative called “Cops, Cameras and Care,” which involves adding MTA and state police officers, more cameras, and re-training mental health clinicians to treat those suffering from mental illness including in-patient and out-patient treatment.
- Instituting transit bans to ban criminals from the transit system.

From January 2022 through September 2022, the following crime reductions took place:

- Major index crimes per rider down by 36 percent
- Track trespassing incidents down by 59 percent
- Vandalism down by 32 percent
- Homeless and quality of life issues at Penn Station down by 78 percent

In addition, for the first time in its history, NYCT is undertaking a monthly customer satisfaction survey, which includes questions related to personal safety and security, as well as cleanliness and other matters. Further, NYCT is also committed to more regular analysis of and reporting on performance metrics. As part of this, the NYCT Department of Buses is beginning a Surface Operations Analytics Review team and the Department of Subways has convened Subway Operations Analytics Review meetings; in both cases, these forums are used for leaders to closely investigate performance and customer satisfaction results by specific bus route or subway line or station.

Regarding safety as it relates to the health risks posed by COVID-19, MTA continues to follow Federal and state guidance developed by public health authorities. MTA continues to routinely clean and disinfect stations and vehicles, make masks and hand sanitizer available in stations, and remind customers and employees about precautions to keep everyone safe. Beginning September 7, 2022, the Federal mask mandate was lifted for public transit, making masks optional for customers on subways, buses, and commuter rail. MTA encourages riders to continue to wear masks, but it is optional to do so.

Comment 26: Can the region’s public transportation system accommodate increased ridership caused by this Project?

Yes, the region’s extensive public transportation system has the capacity to accommodate additional ridership that would occur as some people switch from automobile to public transportation with the new CBD toll. The Project Sponsors conducted a detailed analysis of the Project’s potential effects on the public transportation system using a regional travel demand model originally developed by NYMTC, the BPM, to identify how many people would shift from driving to public transportation as a result of the new toll and when and where those shifts would occur. The analysis considered the overall, regional effects of this shift to transit as well as the specific effects on line-haul (capacity) of particular routes and on specific station elements, such as individual stairs in subway stations.

The analysis of the Project’s potential effects on transit operations incorporated an analysis of existing conditions (the baseline for the analysis) that used ridership data from before the widespread closures, and subsequent decline in ridership, caused by the COVID-19 pandemic. Today, ridership levels have not fully

recovered to the pre-pandemic levels (see **Figures 18A-2, 18A-3, and 18A-4**). Using the higher pre-pandemic ridership numbers accounts for conditions that would occur in the future if traffic levels and transit ridership return to pre-COVID conditions. If that does not occur, then the use of pre-pandemic information for the baseline analysis result in predictions of larger negative effects as a result of the proposed CBD Tolling Alternative than would actually occur. See also the response to **Comment 8**.

As described in response to **Comment 24** and **Comment 25**, MTA is making substantial improvements to its public transportation network, which will continue in the future.

The EA included a detailed analysis of the potential effects of the CBD Tolling Alternative on the region's public transportation system in **Subchapter 4C, "Transportation: Transit."** That analysis evaluated how many new transit riders there would be, and how those new riders would affect each type of transit service, including overall capacity (also referred to as "line-haul" capacity) and operations at individual stations. These are discussed below.

EFFECTS ON TRANSIT RIDERSHIP AND LINE-HAUL CAPACITY

Overall, ridership on the extensive public transportation system linking the Manhattan CBD with the surrounding region would increase by 1 to 2 percent relative to the No Action Alternative. There is sufficient capacity throughout the system, including commuter rail, PATH rail, subway, and bus, to accommodate this increase in passengers. Prior to the COVID-19 pandemic, the share of Manhattan CBD-bound trips made via auto, taxi, van and truck had been steadily declining even while the total number of people entering the Manhattan CBD increased. As a result, subway and commuter rail crowding had increased over time, especially during peak periods, with average floor space per subway passenger declining by 0.9 feet over a 10-year period, and by 1.1 feet for passengers on the PATH system.²¹ Although the system can be very crowded at peak times (although that is less true today than prior to the pandemic), the analysis that the Project Sponsors conducted of the effects of the CBD Tolling Alternative concluded that there is sufficient capacity in the system to accommodate the predicted increase in ridership based on the pre-pandemic levels of crowding.

The CBD Tolling Alternative would not result in the overcrowding of commuter rail cars, subway cars, or buses such that additional trains or buses would be required to meet new demand. While there would be additional passengers using transit during peak AM and PM hours, there would be no adverse effect on system capacity for any of the public transportation modes. MTA routinely evaluates its service plan and makes adjustments to accommodate changes in demand. MTA adjusts its commuter rail, subway, and bus schedules, as needed, multiple times per year. (For more information, see **Sections 4C.4.2.3 and 4C.4.2.4** in **Subchapter 4C** of the EA.)

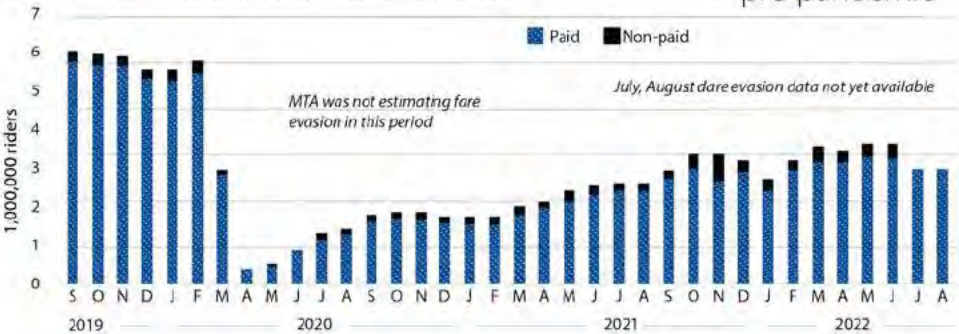
²¹ Table 1B and 8. 2019 Hub Bound Travel Data Report. NYMTC. Accessed 7 November 2023. <
https://www.nymtc.org/Portals/0/Pdf/Hub%20Bound/2019%20Hub%20Bound/DM_TDS_Hub_Bound_Travel_2019.pdf?ver=GS5smEoylHSsHsyX_t_Zriw%3d%3d>

Figure 18A-2. Comparison of Transit Ridership, Pre-COVID vs. Post-COVID

Subway Ridership

The number of paying subway & SIR customers, and estimated number of non-paying customers, on an average weekday

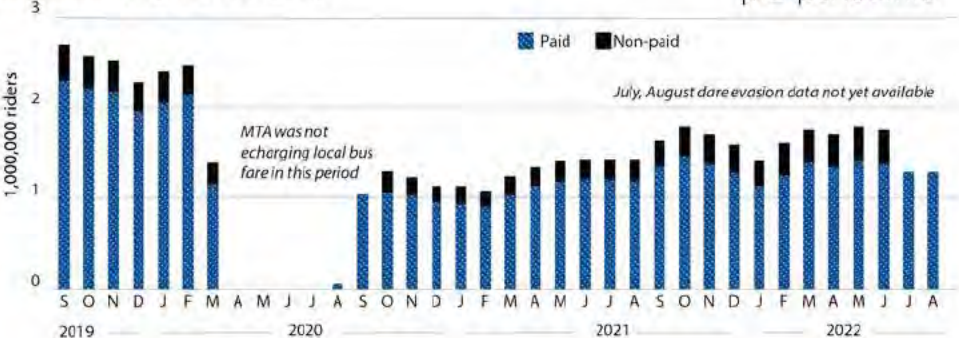
58%
pre-pandemic



Bus Ridership

The number of paying bus (NYCT and MTA) customers, on average on an average day

64%
pre-pandemic



Paratransit Ridership

The number of paying subway & SIR customers, and estimated number of non-paying customers, on an average weekday

81%
pre-pandemic

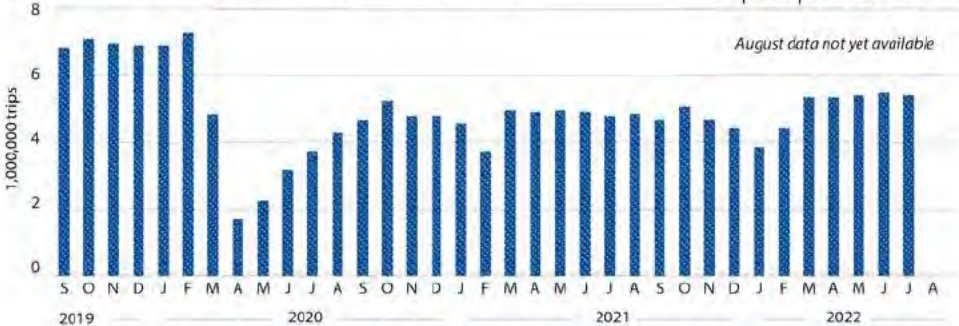


Figure 18A-3. Comparison of Long Island Rail Road Ridership, Pre-COVID vs. Post-COVID

Monthly Ridership

Estimated number of monthly trips taken, per million trips. Ridership is based on ticket sales data.

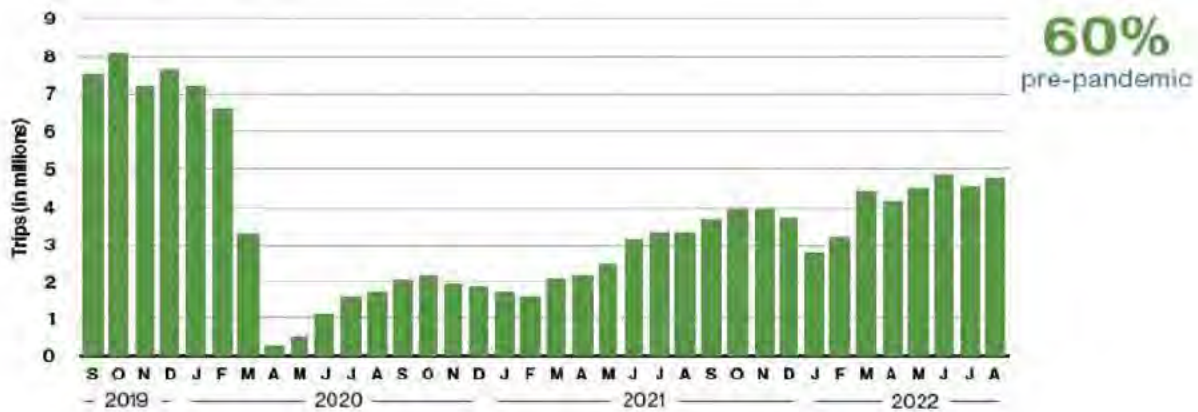
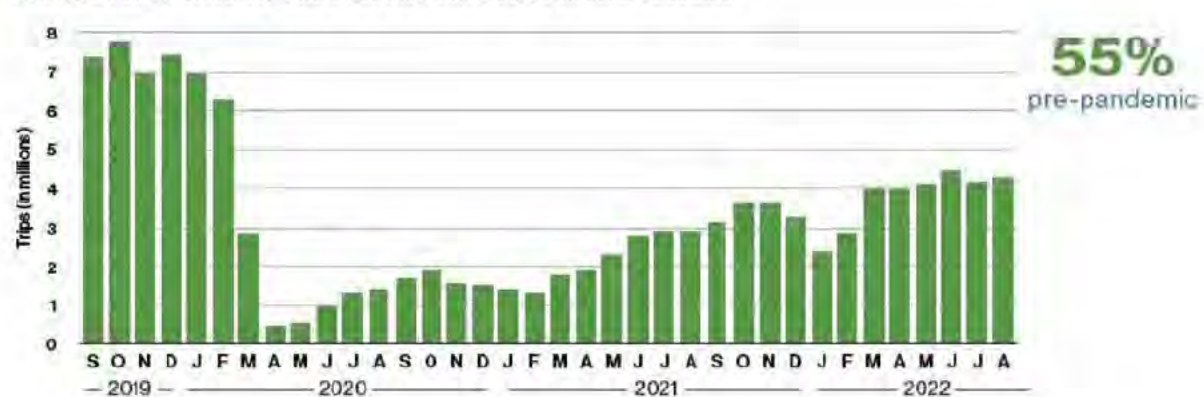


Figure 18A-4. Comparison of Metro-North Railroad Ridership, Pre-COVID vs. Post-COVID

Monthly Ridership

Estimated number of monthly trips taken. Ridership is based on ticket sales data.



EFFECTS ON OPERATIONS IN SUBWAY AND PATH STATIONS

As noted above, during peak periods, the region's public transportation system can be crowded, and individual subway and PATH stations can have high volumes of passengers, although those volumes are now lower than they were prior to COVID-19. The detailed analysis the Project Sponsors conducted concluded that even assuming pre-pandemic ridership levels, transit stations throughout the regional public transportation system have adequate capacity to accommodate the projected increase in passengers as people switch from automobile to transit to avoid the new toll. The detailed analysis showed that the CBD Tolling Alternative could have adverse effects on vertical circulation elements (i.e., stairs and escalators) within four MTA NYCT subway stations in New York City and the PATH/NJ TRANSIT rail terminal in Hoboken, New Jersey during peak periods. At these stations, the Project Sponsors would implement measures to mitigate the effects on these vertical circulation elements. These affected stations, the specific

location within the station where the adverse effect would occur, and the proposed mitigation measures are as follows:

- 42nd Street-Times Square subway station (Manhattan), Stair ML6/ML8 connecting mezzanine to uptown Nos. 1/2/3 subway lines platform (all tolling scenarios): TBTA would coordinate with MTA NYCT to implement a monitoring plan for this location. The plan would identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA would coordinate with MTA NYCT to remove the center handrail and standardize the riser, so that the stair meets code without the hand rail. The threshold would be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.
- Flushing-Main Street subway station (Queens), Escalator E456 connecting street to mezzanine level (all tolling scenarios): TBTA would coordinate with MTA NYCT to implement a monitoring plan for this location. The plan would identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT would increase the speed of the escalator from 100 feet per minute (fpm) to 120 fpm.
- Union Square subway station (Manhattan), Escalator E219 connecting the L subway line platform to the Nos. 4/5/6 subway line mezzanine (all tolling scenarios): TBTA would coordinate with MTA NYCT to implement a monitoring plan for this location. The plan would identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, MTA NYCT would increase the escalator speed from 100 fpm to 120 fpm.
- Court Sq subway station (Queens)—Stair P2/P4 to Manhattan-bound No. 7 subway line (all tolling scenarios): TBTA would coordinate with MTA NYCT to implement a monitoring plan for this location. The plan would identify a baseline, specific timing, and a threshold for additional action. If that threshold is reached, TBTA would coordinate with MTA NYCT to construct a new stair from the northern end of the No. 7 platform to the street. The threshold would be set to allow for sufficient time to implement the mitigation so that the adverse effect does not occur.
- PATH Hoboken Station (New Jersey), Stair 01/02 (Tolling Scenarios E and F): TBTA would coordinate with NJ TRANSIT and PANYNJ to monitor pedestrian volumes on Stair 01/02 one month prior to commencing tolling operations to establish a baseline, and two months after Project operations begin. If a comparison of Stair 01/02 passenger volumes before and after implementation shows an incremental change that is greater than or equal to 205, then TBTA would coordinate with NJ TRANSIT and PANYNJ to implement improved signage and wayfinding to divert some people from Stair 01/02, and supplemental personnel if needed.

The EA includes an evaluation of the CBD Tolling Alternative's potential effects on public transportation in Subchapter 4C, "Transportation: Transit."

Comment 27: How will this Project affect middle-income drivers?

The CBD Tolling Alternative would increase costs for all motorists, at all income levels, who would continue to drive to the Manhattan CBD, unless they are eligible for an exemption. How much those costs would increase would depend on the actual tolling structure.

All areas of New York City outside the Manhattan CBD have transit access to the Manhattan CBD and would not be isolated from community services or ties within the Manhattan CBD. Even with the robust transit accessibility between the Manhattan CBD, New York City, and the regional study area, however, some people would continue to drive to the Manhattan CBD with the new CBD toll in place. The total trip costs incurred by individuals driving to the Manhattan CBD would vary widely, depending on individual circumstances (including route choice and whether other, non-CBD tolls are paid) and the specific tolling scenario (including exemptions and crossing credits). Driving to and from the Manhattan CBD is already expensive given the very limited availability of free or low-cost parking and the cost of off-street parking or taxi/FHV fares, and it is likely that people who drive regularly have higher incomes. Individuals who drive less frequently would incur lower costs because they would pay the toll less often; those who make trips during off-peak periods would benefit from lower off-peak tolls. Since the majority of trips to and from the Manhattan CBD are made by transit, most people would not be affected.

More specific information that illustrates this discussion is provided in the EA in **Subchapter 5A, "Social Conditions: Population Characteristics and Community Cohesion,"** and **Chapter 6, "Economic Conditions."** **Subchapter 5A (Section 5A.4.2.5)** shows the potential change in work trips in the regional study area and the Manhattan CBD by all modes. The number of work journeys by driving modes to and within the Manhattan CBD would decrease by 4 to 10 percent (or 11,800 to 27,000 fewer driving journeys), depending on the tolling scenario (see **Table 6-23** in **Chapter 6**). Many of those people would instead switch to transit. Most workers, particularly those coming from other areas of New York City, would have transit access to the Manhattan CBD, but they might choose to drive despite the CBD toll (for example, because they value the travel-time savings and convenience of driving, or they have work hours that are less conducive for transit). People who do not want to pay the toll or use transit may seek employment elsewhere outside the Manhattan CBD but within the regional study area (see **Table 5A-9**). The total number of work journeys to the Manhattan CBD for all travel modes would decrease from some locations and increase from other locations, which suggests that the CBD Tolling Alternative would result in small shifts in employment patterns (i.e., generally a change of 2 percent or less as shown in **Table 5A-7**).

The CBD Tolling Alternative would also result in beneficial effects for people who continue to drive, as a result of the overall reduction in VMT in the region and enhanced mobility that would result from reduced congestion. The Project would address the demonstrated need to reduce vehicle congestion in the Manhattan CBD, which would benefit all drivers traveling to and near the Manhattan CBD, especially those who value their travel-time savings more than the toll cost. The reduced congestion would produce other related benefits in the Manhattan CBD, including travel-time savings, improved travel-time reliability, reduced vehicle operating costs, improved safety for vehicles, pedestrians, and bicyclists, and improved air

quality in the Manhattan CBD and regionwide. For some drivers, this would potentially offset the negative effect of increasing the cost of driving to the Manhattan CBD.

Some commenters stated that the proposed CBD toll would in effect be a new tax. However, unlike a new tax, the proposed CBD toll would not apply to everyone. Rather, it would only apply to people who drive into the Manhattan CBD, and only when they drive there. Transit riders already have a cost associated with their travel to the Manhattan CBD since they must pay a fare to use the service, but these costs are not currently paid by drivers using certain routes. A toll to enter the Manhattan CBD for drivers is like the user fee (fare) paid by transit riders.

Subchapter 5A, "Social Conditions: Population Characteristics and Community Cohesion," of the EA evaluates the potential effects of the new toll on community cohesion, community facilities and services, and access to employment.

Comment 28: Will the CBD Tolling Program cause residents to relocate outside of the Manhattan CBD or the region?

The Project Sponsors do not anticipate that introduction of the new CBD toll would cause residents to relocate outside of the Manhattan CBD. Indirect residential displacement occurs when a change in socioeconomic conditions resulting from a project leads to conditions that require residents to move, such as increased rents or other increases in the cost of living. Implementing the London Congestion Charge (LCC) improved traffic conditions and increased property values in the charge area relative to areas outside the zone. A study of the LCC concluded that new homeowners were willing to pay, on average, 3.6 percent more for homes within the zone to benefit from better air quality and safer roads.²² Hence, while the Project could result in some residents relocating outside the Manhattan CBD due to increasing property values or rents, the benefits of a less congested and improved living environment may also play a role in encouraging residents to remain within the Manhattan CBD.

The Project Sponsors conducted an analysis of this issue for the EA, which concluded the following:

- The majority of Manhattan CBD residents use public transportation rather than a private vehicle to travel to and from the Manhattan CBD. Approximately 80 percent of the households in the Manhattan CBD do not own a vehicle.
- Certain residents of the Manhattan CBD who do drive and would therefore pay the new toll would be entitled to a New York State tax credit to offset their toll.
- Many factors influence a household's decision about where to live, and each household seeking to avoid the toll would undertake its own decision-making process. It is unlikely that the toll would outweigh the other factors that influence a household's decision on where to live such that it would result in indirect residential displacement.

²² A study of conditions in London found that reductions in traffic in the congestion zone increased residential sales prices in the congestion zone. Tang, Cheng Keat. 2018. "Essays in the economics of transportation, housing and discrimination." PhD thesis, The London School of Economics and Political Science. etheses.lse.ac.uk/3797/.

- The real estate market is complex and influenced by many factors, and the new toll could make Manhattan CBD real estate more attractive for some, and less attractive for others. A reliable and comprehensive public transportation system could also make surrounding areas near the Manhattan CBD more appealing to many people. Any changes in residential patterns related to residents moving closer to transit would be broadly distributed throughout the regional study area because of the variety of factors influencing a household's decision about where to live. Therefore, no particular area would likely see a significant inflow or outflow of new residents seeking to avoid the toll. The CBD Tolling Alternative would be unlikely to result in notable relocation due to changes in real estate market conditions.

Nonetheless, it is conceivable that some individuals who regularly drive to and from the Manhattan CBD might relocate to avoid the toll. The EA includes an evaluation of these factors in **Subchapter 5A, "Social Conditions: Population Characteristics and Community Cohesion."**

For more information, see **Subchapter 5A, "Social Conditions: Population Characteristics and Community Cohesion,"** of the EA.

Comment 29: What are the potential effects of the Project to elderly populations?

There are various reasons that elderly people drive to the Manhattan CBD, including trips to work, trips to shop, dine, or attend a performance, trips to visit friends or family, and trips to community facilities, including medical appointments. There is a transit option for reaching most destinations within the Manhattan CBD, including local buses that stop within a block or two of most destinations. People over the age of 65 or with a qualifying disability receive a reduced fare on MTA subways and buses, and elderly individuals with a qualifying disability can also receive MTA's paratransit service, including taxis and FHV's operating on behalf of MTA to transport paratransit users. For more information on MTA's paratransit service, see the response to **Comment 19**. Elderly people who drive to or from the Manhattan CBD and are low-income would be entitled to the same mitigation measures and enhancements proposed for all low-income populations with the CBD Tolling Alternative (see response to **Comment 37**). Other elderly individuals who drive to the Manhattan CBD would pay the full toll.

Elderly drivers would benefit from reduced traffic congestion in the Manhattan CBD, which would improve travel times and the reliability of their vehicle trips. Elderly bus riders would benefit from the travel-time and reliability improvements to bus service with the CBD Tolling Alternative.

For more information regarding the analysis of the Project's effects on elderly people, see the EA, **Subchapter 5A, "Social Conditions: Population Characteristics and Community Cohesion."**

Comment 30: Why should patients from regional locations and other locations in New York City have to pay to enter the Manhattan CBD for medical appointments?

Some people who currently drive to the Manhattan CBD for medical services may seek alternative locations outside the Manhattan CBD if they do not want to pay the toll. While there are many hospitals, clinics, and medical specialists within the Manhattan CBD, there are also service providers located outside the

Manhattan CBD, including prominent research hospitals such as Mount Sinai, Memorial-Sloan Kettering Cancer Center, and New York Presbyterian Hospital. Also, many doctors have office locations both within and outside the Manhattan CBD. Some people living outside the Manhattan CBD may not have or want to seek an alternative provider outside the Manhattan CBD and would be subject to the toll if they drive to their appointments. Similarly, some residents within the Manhattan CBD may need to travel to medical appointments outside of the Manhattan CBD and would be subject to the toll. At this time, the actual toll schedule, including exemptions, discounts, and crossing credits, has not been finalized (see response to **Comment 18**).

It is noted that many trips to medical facilities are taken by taxis, and the EA includes Tolling Scenarios C and E where taxis are exempt such that there would be no cost passed on to patients taking these modes. Furthermore, there are numerous programs that offer free or discounted transportation for medical travel that can be used to access medical providers in the Manhattan CBD at low or no cost. Many of these programs are specifically for those who are low-income, enrollees in Medicaid and Medicare plans, veterans, and persons with developmental disabilities. For example, Medicaid Transportation–NEMT (Non-Emergency Medical Transportation) provides free transportation services to patients and healthcare customers who need assistance getting to and from medical appointments. Servicers then submit transportation expenses, including tolls, for reimbursement. Further, Medicare recipients in the New York metropolitan area can apply for Age Well New York Advantage plus, where Medicare/Medicaid pays for transportation by ambulance, ambulate, taxi/livery service, or public transit. Another service is Lyft Pass for Healthcare, whereby nine of the largest healthcare system NEMT brokers provide transportation to their patients to get to healthcare appointments by using the Lyft app. These are just three examples of many services currently offered to qualifying individuals, which they can continue to use if the Project is implemented.

Transit also remains an option for travel to medical appointments and Reduced Fare MetroCards are available to those who are age 65 and above or have qualifying disabilities. NYCT Access-A-Ride also provides transportation for eligible customers with disabilities that prevent them from using buses and subways. Personal care attendants (PCA) are also eligible to ride MTA buses, subways, and rail roads for free when accompanying a person carrying an Access-A-Ride MetroCard with the PCA designation. One of the main aims of the Project is to reduce congestion, which in turn could make these trips faster and more reliable for those who drive, or use Access-A-Ride or transit to seek medical care.

Finally, the Internal Revenue Service allows for medical tax deductions to the extent that they exceed 7.5 percent of the adjusted gross income of those filing their taxes. This includes a host of travel expenses, including but not limited to vehicle expenses including tolls.

Subchapter 5A, “Social Conditions: Population Characteristics and Community Cohesion,” of the EA discusses the effects of the CBD Tolling Alternative on people who drive to medical appointments in the Manhattan CBD.

Comment 31: How will the CBD Tolling Program affect businesses and the economy?

Commenters expressed concern that the CBD Tolling Program would adversely affect economic conditions in the Manhattan CBD and potentially New York City. The following paragraphs describe the effects of the CBD Tolling Alternative on businesses and the economy from the perspective of employees, businesses, and specific industries. More information about this topic is available in the EA in **Chapter 6, “Economic Conditions.”**

ACCESS TO EMPLOYMENT

Given the highly transit-accessible nature of the Manhattan CBD, the Project’s toll on auto commuters would directly affect a relatively small percentage of the overall workforce. Approximately 11.3 percent of Manhattan CBD jobs are held by workers who use cars to travel to work, and most of those employees do not work in areas far from transit or at jobs dependent on automobiles. Approximately 99 percent of Manhattan CBD workers—and approximately 99 percent of the subset who commute from outside the Manhattan CBD—work within 1/2 mile of a subway station or SBS stop within the Manhattan CBD. In terms of those commuting from within the Manhattan CBD, a vast majority utilize public transportation or have close access to public transportation at their workplace. Approximately 14.5 percent of workers who live in the Manhattan CBD and work outside the Manhattan CBD drive to their jobs. Of those people, approximately 90.0 percent are traveling to jobs in New York City that are within 1/2 mile of public transportation (subway, railroad, or express or SBS bus stop).

Census data indicates that in the aggregate, there are no industry or occupational categories within the Manhattan CBD for which commuters have a greater propensity or need to commute by auto. While there are higher rates of auto commuting for specific industries and occupations within certain locations in the Manhattan CBD, the total numbers of employees working at those locations do not constitute a substantial percentage of the total workforce for any industry or occupation within the Manhattan CBD or broader regional study area. The tendency for these workers to commute by auto appears related more to distance from transit and/or availability of free parking than to needs of their occupations or industries. There are certain workers who commute by auto due to a need to transport job-related specialized equipment (e.g., HVAC specialists, construction contractors, musicians) or whose work is driving (e.g., taxi and FHV drivers, delivery workers, or couriers). Some of these drivers would benefit from time savings due to faster travel times that result from reduced congestion (either by allowing them to be more productive or allowing them to have more downtime that would otherwise have been spent in traffic). For these individuals, the time savings could be perceived as an off-set to the toll increase. For others, especially those who work during off-peak hours, lower overnight tolls would be beneficial. For additional information, see responses to **Comment 18** and **Comment 39**.

EFFECTS ON SPECIFIC INDUSTRIES

At a regional level, the CBD Tolling Alternative would not substantively alter one or more of the underlying forces that shape real estate market conditions, and therefore would not be likely to result in the involuntary displacement of residents, businesses, or employees.

No specific industry or business type would be adversely affected by the new toll. There is already a high cost associated with locating in or travel to the Manhattan CBD, and the toll cost would not meaningfully change the competitiveness or attractiveness of doing business in the Manhattan CBD. Businesses, like workers and residents, are adversely affected by congestion and the cost and inefficiencies that result. A study conducted for Partnership for New York City found that traffic congestion in the New York metropolitan area has a \$20 billion annual cost, including more than \$9 billion in travel-time costs and nearly \$6 billion in industry revenue losses.²³ Congestion pricing benefits drivers and businesses by reducing delays and stress, by increasing the predictability of trip times, and by allowing for more deliveries per hour for businesses.²⁴ More reliable and productive workforce as well as improved ability to schedule and complete deliveries could have beneficial impacts on businesses in the Manhattan CBD. If the Project is approved, the Project Sponsors will collect and evaluate data related to these potential benefits as part of the ongoing monitoring of the Project (described in **Chapter 16, "Summary of Effects"**) once it is in operation. This will include truck speeds and traffic flows, truck crashes (fewer crashes may signal more optimal goods movement), and tonnage and commodity flows (which may be a signal of productivity) to the extent practicable as data becomes available. A formal report on the effects of the Project will be issued one year after implementation and every two years thereafter. In addition, a reporting website will make data, analysis, and visualizations available in open data format to the greatest extent practicable.

The analysis in **Chapter 6 (Section 6.3.2.5)** of the EA considered the potential effects of the CBD Tolling Alternative on consumer spending at businesses and tourist areas in the Manhattan CBD. As discussed in the EA, a vast majority of non-work-related journeys to the Manhattan CBD, which include journeys for activities such as dining and entertainment, are conducted by modes other than auto. With the CBD Tolling Alternative, the transportation modeling conducted for the Project indicates that some non-work-related journeys to the Manhattan CBD by auto would continue (with potential reductions in some discretionary expenditures to compensate for the toll cost) and some would transition to public transit, such that there would be a small net change (less than 1 percent) in non-work-related journeys to the Manhattan CBD (see **Table 6-28** and **Table 6-29** in **Chapter 6**). Therefore, a reduction in non-work journeys to the Manhattan CBD would not be expected to substantively alter expenditures within any particular industry or category of consumer expenditures, such as dining at restaurants.

The tourism industry in the Manhattan CBD is not dependent on travel by personal vehicles or taxis/FHVs, because the Manhattan CBD and tourist destinations within it are very well-served by public transit. Travel writing on New York City frequently cites transit, especially the New York City subway system, as the most convenient way to get around New York City.²⁵ This is supported by a 2014 travel survey of visitors to the Empire State Building observation deck, a notable tourist attraction, which found that approximately 4 percent of the visitors arrived by private auto or taxi, and the remainder traveled by transit, walk, or tour

²³ Partnership for New York, January 2018. *\$100 Billion Cost of Traffic Congestion in Metro New York*. <https://pfnyc.org/wp-content/uploads/2020/01/2018-01-Congestion-Pricing.pdf>. The study defined the New York metropolitan area as including New York City, Westchester, Putnam, and Rockland Counties, and northern New Jersey.

²⁴ U.S. Department of Transportation Federal Highway Administration, October 2008. *Congestion Pricing: A Primer Overview*. <https://ops.fhwa.dot.gov/publications/fhwahop08039/fhwahop08039.pdf>.

²⁵ <https://www.nycgo.com/plan-your-trip/basic-information/transportation-in-nyc/getting-around>.

bus modes.²⁶ Studies have identified investments in mass transit as important to supporting the health and growth of New York City's tourism industry, both before²⁷ and after²⁸ the COVID-19 pandemic. Furthermore, traffic congestion within the Manhattan CBD, which leads to low travel speeds and unreliable travel times, can contribute to a poor-quality experience for tourists.

Visitors from the surrounding region (i.e., New York, New Jersey, Connecticut, and Pennsylvania) often travel to New York City by rail transit rather than by automobile,²⁹ and for those that drive to the city, it is likely that many park their vehicles and shift to transit for travel within the city. Furthermore, driving to and from the Manhattan CBD is already expensive given the very limited availability of free or low-cost parking and the cost of taxi/FHV fares, and it is likely that tourists who drive have higher incomes. For these individuals, the additional cost of the toll may reduce their discretionary expenditures slightly or incentivize them to choose other modes of transportation during their visit but would be unlikely to cause them to forego a visit to the Manhattan CBD.

Tourist visitation data from London, England, and Stockholm, Sweden, indicates that the number of tourists visiting these cities continued to grow following the implementation of congestion-based pricing programs in 2003 and 2007, respectively. In London, the number of visiting tourists increased from 11 million in 2002 to more than 19 million in 2016. In Stockholm, the number of commercial overnight stays increased by approximately 60 percent from 2008 to 2019. These data suggest that congestion-based pricing schemes did not adversely affect the tourism industries of these cities. In addition, in the central London charging zone, the hotel and restaurant sectors (both of which are dependent on tourism) registered stronger business performance since the introduction of charging, with consistent growth in employment and the numbers of businesses.³⁰

Overall, these data support the EA conclusion that the CBD Tolling Alternative would not be expected to substantively alter expenditures within any particular industry, including the tourism industry, restaurants, and Broadway. For more information, see EA Chapter 6, "Economic Conditions," Section 6.3.2.5.

Refer to response to **Comment 34** for information about potential effects on the parking industry and response to **Comment 38** about potential effects on the taxi/FHV industry.

EFFECTS ON SMALL BUSINESSES

In New York State, a small business is defined as one that has fewer than 100 employees and is independently owned and operated, as defined in Section 131 of the New York State's Economic Development Law. There are approximately 77,121 businesses in the Manhattan CBD. Most of these

²⁶ Vanderbilt Corridor and One Vanderbilt Final Environmental Impact Statement. March 2015. https://www1.nyc.gov/assets/planning/download/pdf/applicants/env-review/vanderbilt/10_feis.pdf. pg 10-7.

²⁷ *Ibid.* pg 34.

²⁸ Office of the New York State Comptroller. *The Tourism Industry in New York City" Reigniting the Return*. April 2021. Available: <https://www.osc.state.ny.us/files/reports/osdc/pdf/report-2-2022.pdf>. pg 16.

²⁹ NYC and Co. <https://indd.adobe.com/view/e91e777a-c68b-4db1-a609-58664a52cffd>. pg 7.

³⁰ Transport for London, July 2007. *Central London Congestion Charging: Impacts Monitoring (Fifth Annual Report)*. <https://content.tfl.gov.uk/fifth-annual-impacts-monitoring-report-2007-07-07.pdf>.

businesses (approximately 91.0 percent) are small businesses, and a large majority of them (78.0 percent) are also considered micro-businesses (fewer than 20 employees). Given that 91 percent of the businesses in the Manhattan CBD are small businesses, the conclusions of the EA overall related to economic conditions apply to small businesses.

Small businesses with fewer than 20 employees would be more sensitive to goods delivery cost increases to the extent that they may result from the toll increases proposed under the CBD Tolling Alternative. **Chapter 6** of the EA presents an analysis of the CBD Tolling Alternative's potential to affect the price of goods in the Manhattan CBD, including the cost to smaller businesses such as local markets and delis. Small businesses that have a high rate of deliveries, and most specifically small retail businesses such as grocery stores, restaurants, and small market convenience stores, are dependent on frequent deliveries of smaller loads, and delivery of goods represent a higher portion of their operating costs. There are approximately 600 such businesses within the Manhattan CBD, representing slightly less than 1 percent (0.7 percent) of all businesses within the Manhattan CBD.

An analysis conducted within the LCC zone highlighted that the congestion charge is likely to have different effects across businesses, but no significant effect on total Central London retail sales. Additionally, a survey of 500 businesses conducted in early 2004 (about a year after the charge was introduced) found that 72 percent of respondents felt that congestion pricing was working (with 14 percent saying it was a failure), and 58 percent felt it improved London's image (with 15 percent saying it gave London a bad image to outsiders). Overall, a plurality of business respondents felt the impact on London's economy was neutral (32 percent), with equal numbers identifying positive and negative effects (26 percent).³¹

The analysis in the EA (see **Chapter 6, Section 6.3.2.2**) concludes that the incremental toll costs that are passed along to receiving businesses would be passed in a diluted fashion. Because shippers would allocate the toll costs among the multiple receivers on a journey (on average, shippers to destinations in New York City make 5.5 stops per journey³²), the toll cost passed on to each business would be much less than the toll itself.

Review of research on congestion-based pricing programs in Singapore; London, England; and Stockholm, Sweden found that these programs had not adversely affected retail markets. In Singapore, surveys suggested that the pricing did not change business conditions or location patterns, and that overall, the business community responded positively to the program.³³ In London, analyses and surveys indicate congestion pricing has neutral regional economic impacts: five years after the implementation of the central London congestion charging scheme, there was no measurable evidence of any differential impact of the pricing on business and economic activity at the aggregate level. Annual surveys suggest businesses in the priced zone have outperformed those outside, with retail businesses in the central London charging

³¹ Leape, Jonathan. 2006. "The London Congestion Charge." *Journal of Economic Perspectives*, 20 (4): 157-176. <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.20.4.157>.

³² Holguín-Veras, José, et al. September 2010. *Integrative Freight Demand Management in the New York City Metropolitan Area*. <http://www.nyc.gov/html/dot/downloads/pdf/ohd-final-report.pdf>.

³³ K.T. Analytics, Inc. August 2008. *Lessons Learned from International Experience in Congestion Pricing, Final Report*. https://ops.fhwa.dot.gov/publications/fhwahop08047/intl_cplearnings.pdf.

zone outperforming retail businesses in inner and outer London in terms of sales, profitability, and employment growth.³⁴ In Stockholm, studies of retail markets did not reveal adverse effects resulting from congestion charges. A durables survey within shopping centers, malls, and department stores conducted during the Stockholm program's trial period found that these entities developed at the same rate as the rest of the country; the same was true for other retail sectors.³⁵

While it is important to acknowledge that the analysis in the EA concludes that increased cost to businesses could be passed on to customers, growing congestion and unreliability threatens productivity and, ultimately, the ability to deliver products within the Manhattan CBD. In addition, when timely deliveries cannot be relied on, small businesses must keep extra inventory on hand. This can be expensive and lead to increased operating costs, which too could be passed on to customers. Implementing the CBD Tolling Program to guarantee dependable traffic flow would provide delivery reliability, helping to keep businesses' operating costs stable. Consistent delivery times and lower operating costs would increase small business competitiveness within the Manhattan CBD economy. Notably, a study of the LCC showed that the hotel and restaurant sector within the zone registered stronger business performance with an average growth of 1 to 3 percent per year. The LCC zone has also generally outperformed other areas in London in terms of profitability.³⁶ Therefore, small businesses within the Manhattan CBD could experience positive growth with the introduction of the CBD Tolling Program.

In recognition of the concerns of small businesses on the effects of the Project, the Project Sponsors have committed to establishing a Small Business Working Group (SBWG) if the Project is approved. The purpose of this group will be to share information about implementation of the Project, findings from evaluating the effects of the Project, and to solicit ongoing input on whether and how businesses are being affected. The SBWG would meet 6 months prior to Project implementation, 6 months after the implementation, and annually thereafter. For further information see response to **Comment 39**.

For information on the effects of the CBD toll on the costs of goods and services in the Manhattan CBD, see the response to **Comment 32**.

Comment 32: How will the CBD Tolling Program affect the cost of goods and services?

Commenters are concerned that the new toll would result in higher delivery costs that would be passed on to consumers in the form of higher prices for goods and services in the Manhattan CBD. While the new CBD toll would increase the cost of truck deliveries to the Manhattan CBD for some shippers (because of the price of the new toll), it would reduce it for others (because of reduced operating costs due to decreased travel time during peak hours). As described in **Chapter 6, "Economic Conditions,"** 80 percent of the

³⁴ K.T. Analytics, Inc. August 2008. *Lessons Learned from International Experience in Congestion Pricing, Final Report and Transport of London*, July 2008, *Central London Congestion Charging Impacts Monitoring*. <https://content.tfl.gov.uk/central-london-congestion-charging-impacts-monitoring-sixth-annual-report.pdf>.

³⁵ Eliasson, Jonas, KTH Royal Institute of Technology, prepared for the Centre for Transport Studies Stockholm, July 2014. *The Stockholm Congestion Charges: An Overview*. <https://www.transportportal.se/swopec/cts2014-7.pdf>.

³⁶ Transport for London, July 2007. *Central London Congestion Charging: Impacts Monitoring (Fifth Annual Report)*. <https://content.tfl.gov.uk/fifth-annual-impacts-monitoring-report-2007-07-07.pdf>.

commercial activity conducted by trucks occurs during daylight hours between 7:00 a.m. and 7:00 p.m. Congestion within Midtown Manhattan impedes truck mobility during the day, with truck speeds dropping to 7 miles per hour, which is 50 percent slower than off-peak periods (between 7:00 p.m. and 7:00 a.m.). The specific change to the cost of a given truck delivery would vary greatly depending on the toll rate, whether there is a cap on the number of tolls per day, and the number of times a truck is detected entering or remaining in the Manhattan CBD.

Businesses in the Manhattan CBD that would be more likely to be affected by increased delivery costs associated with tolling increases are small businesses that have a high rate of deliveries, and most specifically small retail businesses such as grocery stores, restaurants, and small market convenience stores, since they are dependent on frequent deliveries of smaller loads and delivery of goods represent a higher portion of their operating costs. There are approximately 600 such businesses within the Manhattan CBD, representing slightly less than 1 percent (0.7 percent) of all businesses within the Manhattan CBD.

The analysis in **Chapter 6** concludes that the incremental toll costs that are passed along to receiving businesses would be passed on in a diluted fashion, because shippers would allocate the toll costs among the multiple receivers on a journey (within New York City, averaging 5.5 stops per journey).³⁷ While small retail businesses may receive more frequent deliveries, shippers to small retail stores typically make many stops and consequently would share toll costs among those multiple receivers.

An incremental cost to any one retail store would be passed along as an incremental cost to consumers but would represent a very small component of the retail price charged to the consumer. In addition, the incremental cost of the new toll passed to receivers could be further diluted by cost savings realized by shippers due to reduced congestion, which would reduce the cost of delivering goods and services because of decreased travel times and lower operating costs incurred on the transportation system, and could ultimately lower the cost of some products consumed in New York City.³⁸

The extent of potential delivery cost savings would vary depending on the toll cost, the delivery route, timing of delivery, and the level of reduced congestion along the route that would be realized under the tolling scenarios. There are also less obvious costs associated with congestion that could be reduced, such as the cost of remaining open for longer hours to process late deliveries; penalties for lost business revenue associated with missed schedules; cost of spoilage for time-sensitive, perishable deliveries; cost of maintaining greater inventory to cover the undependability of deliveries; costs of reverting to less efficient production scheduling processes; and the additional cost incurred because of access to reduced markets for labor, customer, and delivery areas.³⁸

For the Final EA, the Project Sponsors have added two new mitigation commitments to incentivize off-peak truck deliveries and reduce the number of trucks that divert around the Manhattan CBD: 1) a commitment to further reduce overnight toll rates; and 2) a commitment to expand NYCDOT's Off-Hours Delivery

³⁷ Holguín-Veras, José, et al. September 2010. *Integrative Freight Demand Management in the New York City Metropolitan Area*. <http://www.nyc.gov/html/dot/downloads/pdf/ohd-final-report.pdf>.

³⁸ Cambridge Systematics, Inc. and Texas Transportation Institute. September 2005. *Traffic Congestion and Reliability Trends and Advanced Strategies for Congestion Mitigation*. https://ops.fhwa.dot.gov/congestion_report/congestion_report_05.pdf.

Program, a pilot program that provides support for businesses that shift their deliveries to off-peak periods. The reduction of overnight toll rates would also benefit some workers and businesses. For more information, see the response to **Comment 39**. **Chapter 6, "Economic Conditions,"** of the EA (**Section 6.3.3.2**) provides an evaluation of the potential effects of the CBD Tolling Alternative on the delivery of goods to and within the Manhattan CBD. For more information on the effects of the CBD Tolling Alternative on small businesses, see the response to **Comment 31**.

Comment 33: How will the Project affect traffic outside the Manhattan CBD?

The Project Sponsors evaluated the potential effects of the CBD Tolling Program using a comprehensive travel demand forecasting model, the BPM, which is the New York City region's primary long-range travel forecasting model (see response to **Comment 9** for information on the BPM). The model results predict changes in the region's travel characteristics that would result from changes to the transportation network (in this case, introduction of a new CBD toll), and specifically how trips would be made to, from, through and around the Manhattan CBD, including any changes in the total number of trips, routes, and travel mode (e.g., transit vs. automobile). The Project Sponsors evaluated the effects of seven different tolling scenarios with different characteristics, such as toll price, crossing credits, caps, and exemptions, to identify how these characteristics would affect travel behavior.

Crossing credits would more efficiently distribute traffic across the East River crossings by making the net toll amount paid by a driver at each crossing similar. However, the more vehicles that receive crossing credits, discounts, and exemptions, the higher the toll must be to ensure sufficient revenues are generated to meet the Project's revenue target. At the same time, the model results demonstrate that depending on the combination of toll cost and other variables such as crossing credits, a higher toll can result in more diverted traffic to highways that bypass the Manhattan CBD and potential effects on the environmental justice populations that live near these highways. **Subchapter 4A, Transportation: "Regional Transportation Effects and Modeling,"** of the EA presents the results of the travel demand modeling.

CHANGES IN VEHICLE-MILES TRAVELED (VMT)

In all tolling scenarios, the overall VMT in the region would decrease as some drivers switch to transit or elect not to make their trip. In 2023, the decrease in VMT would range from -0.2 percent (Tolling Scenarios A, B, F, and G) to -0.4 percent (Tolling Scenario E), and in 2045, the decrease ranges from -0.2 percent (Tolling Scenarios A, B, C, and G) to -0.5 percent (Tolling Scenario E) (see **Tables 4A-7** and **4A-13** in the **Subchapter 4A** of EA). In addition, some people who previously drove through the Manhattan CBD would choose a different path to avoid the Manhattan CBD altogether and some drivers who would continue to drive to the Manhattan CBD but would choose a different route, depending on whether crossing credits are included as part of the tolling program.

As described in **Subchapter 4A (Section 4A.4.5)**, under all tolling scenarios, daily VMT would decline across the 28-county region, with the greatest declines occurring within and in areas closest to the Manhattan CBD. Due to traffic diverting around Manhattan to avoid the CBD toll, VMT would increase on Staten Island for all tolling scenarios and in the Bronx for Tolling Scenarios A, B, C, F, and G. In Staten Island and the

Bronx, most of the change would be from personal vehicles, with a smaller change due to trucks. **Tables 4A-25 and 4A-27 in Subchapter 4A** present information on these changes.

The Project Sponsors evaluated in additional detail the changes in VMT that would occur within or near environmental justice areas (i.e., areas with low-income and/or minority populations). As shown in **Tables 4A-23 and 4A-24 in Subchapter 4A**, while overall VMT would be reduced in the 10-county study area evaluated for air quality, VMT would increase in some locations due to diversions. In particular, Bergen County, Richmond County and Bronx County would all have areas that experience localized increases in VMT. Levels of VMT reduction and increase would vary by tolling scenario. Outside the Manhattan CBD, these changes would occur predominantly on highways, with minimal change on local streets. Using results from the BPM, the Project Sponsors conducted a detailed analysis of changes to traffic congestion on highways and local streets that would occur as a result of a new CBD toll. See **Table 4B-32 in Subchapter 4B, “Transportation: Highways and Local Intersections.”** That analysis considered changes on highways and intersections throughout the regional study area and shows that on the majority of roads in and near the Manhattan CBD and travel routes to and from the Manhattan CBD, the CBD Tolling Alternative would reduce traffic volumes because drivers would avoid entering the Manhattan CBD or shift to transit. This is described in more detail below. In addition, see the response to **Comment 35** for maps illustrating where VMT increases would occur and how those locations relate to environmental justice communities.

EFFECTS ON HIGHWAY SEGMENTS

Detailed analysis of traffic flows was conducted for 10 highway segments approaching the Manhattan CBD, which concluded that in tolling scenarios with the highest traffic volumes, increased traffic would result in adverse effects in the form of increased delays and queues during the midday and PM peak hours on three highway segments—the westbound LIE (I-495) near the Queens-Midtown Tunnel (midday and PM peak hours), approaches to the westbound George Washington Bridge on I-95 (midday peak hour), and the southbound and northbound FDR Drive between East 10th Street and the Brooklyn Bridge (PM peak hour). For these locations, if a tolling scenario is implemented that would result in the highest projected level of traffic volumes, the Project Sponsors would implement Traffic Demand Management measures such as ramp metering, motorist information, signage, and/or targeted toll policy modifications to reduce diversions. The Project Sponsors would undertake monitoring of traffic patterns specifically tailored to the adopted tolling scenario—commencing prior to implementation with data collection approximately 3 months after the start of Project operations—to determine whether the predicted adverse effects are occurring and to determine the appropriate Transportation Demand Management measures (or improvement in existing Transportation Demand Management measures) to be implemented. The monitoring program would inform the development and implementation of appropriate Transportation Demand Management measures and possible adjustments to the tolling policy should delays increase more than 2.5 minutes.

EFFECTS ON LOCAL INTERSECTIONS

The EA analyzed 102 intersections at locations most likely to see a change in traffic volumes both within and outside the Manhattan CBD—primarily locations near bridges and tunnels connecting to the

Manhattan CBD. The analysis showed that the majority of intersections would experience a reduction in delay.

The assessment of local intersections incorporated the tolling scenario that would result in the greatest increase in traffic at these intersections of the seven scenarios examined in the EA, which was generally Tolling Scenario C or Tolling Scenario D. Four intersections were found to be potentially adversely affected by the CBD Tolling Alternative during at least one peak hour: Trinity Place at Edgar Street in the midday peak hour (in Lower Manhattan near the Hugh L. Carey Tunnel), East 37th Street at Third Avenue between 9:00 p.m. and 10:00 p.m. and East 36th Street at Second Avenue in the midday peak hour (both in Midtown Manhattan near the Queens-Midtown Tunnel), and East 125th Street at Second Avenue in the AM and PM peak hours (in East Harlem near the Robert F. Kennedy Bridge). Signal-timing improvements would mitigate any potential adverse traffic effects at all locations.

The Project Sponsors would undertake pre- and post-implementation monitoring at the four intersections with identified potential adverse effects during the first year after implementation of the Project, with post-implementation monitoring starting no sooner than 3 months after the start of operations to account for an initial period of fluctuation in travel behavior. The monitoring would be used to validate the need for, and design of, potential mitigation measures. The Project Sponsors commit to using a range of traffic operations and street design strategies at the four intersections (e.g., signal-timing/phasing changes, lane assignment changes, changes to curbside regulations, etc.) to mitigate adverse effects associated with the adopted tolling scenario, to the extent practicable. In addition, the robust post-implementation biennial Evaluation Report mandated by the Traffic Mobility Act would include traffic data collection at intersections in and around the Manhattan CBD and other locations of interest in the form of Automatic Traffic Recorder and camera-based vehicle classification and turning movement counts. These data would be used to identify and quantify actual traffic effects associated with the adopted tolling scenario and to inform the development of appropriate mitigation measures, if needed.

POTENTIAL EFFECTS ON ENVIRONMENTAL JUSTICE POPULATIONS

The traffic analysis included highway segments and intersections in areas where identified environmental justice populations live. All 10 highway segments analyzed in detail in the EA are within or adjacent to environmental justice census tracts. Of the 102 intersections that were analyzed, 43 are in environmental justice neighborhoods, including some locations requested during enhanced environmental justice outreach for the Project. The Project Sponsors are committing to mitigation measures to address the potential adverse effects on highway segments and local intersections, including the locations within environmental justice communities.

For information on how traffic diversions might affect environmental justice communities, see response to **Comment 35**.

SUMMARY OF CONCLUSIONS RELATED TO TRAFFIC INCREASES IN NEIGHBORHOODS CLOSE TO THE MANHATTAN CBD BOUNDARY

As described above, the EA examines potential changes in traffic volumes on highway segments and at local intersections in the neighborhoods in and near the Manhattan CBD at locations where traffic is most likely

to increase as a result of the CBD Tolling Alternative. Based on the conclusions of the traffic analysis in the EA described above, including the analysis of highway segments and of local intersections, neighborhoods in and near the Manhattan CBD would not see an increase in traffic congestion.

Comment 34: How will the Project affect parking?

The Project Sponsors evaluated the effects of the Project on parking demand and capacity, including potential effects on parking conditions near the Manhattan CBD boundary and parking effects at transit hubs outside the Manhattan CBD, as described below. In addition, the Traffic Mobility Act requires that NYCDOT study the effects of the CBD Tolling Program on parking conditions and availability in and around the Manhattan CBD following implementation of the Project and prepare a report describing the results of this study 18 months after the Project commences.

EFFECTS ON PARKING NEAR THE MANHATTAN CBD BOUNDARY

The analysis of the potential effects of the Project on parking conditions considered locations where transportation modeling predicts an increase in vehicle trips that would result from the Project. This analysis considered locations outside the Manhattan CBD both within Manhattan and in other locations.

Transportation modeling conducted for the Project using the BPM shows that in Manhattan, the number of cars on each of the avenues immediately north of 60th Street would decrease under all tolling scenarios; therefore, there would not be an increase in parking demand in those neighborhoods because there would be fewer cars traveling to them. For more information, see the analysis in the EA in **Subchapter 4D, “Transportation: Parking.”**

The neighborhoods closest to the Manhattan CBD, including the Upper East Side (i.e., East 59th Street to East 96th Street, from Central Park to the East River), the Upper West Side (i.e., West 59th Street to West 110th Street, from Central Park to the Hudson River), Long Island City in Queens, and Williamsburg and Downtown Brooklyn in Brooklyn, have curbside parking on local streets. In these neighborhoods, as in the rest of New York City, curbside parking is generally heavily used, with high demand and few available spaces during most times of the day. Consequently, on-street spaces are generally not a reliable source of parking and finding available parking spaces that are not already occupied can involve substantial time searching for an available space. While transportation modeling conducted for the Project does not indicate an increased demand for parking in neighborhoods outside but close to the Manhattan CBD, if this were to occur as a result of the new CBD toll—for example, immediately after the toll is implemented, before drivers adjust to the new conditions—those drivers seeking parking would increase demand for the very limited curbside parking and for off-street parking lots and garages. The analysis presented in the EA (see **Chapter 6, “Economic Conditions,” Section 6.4.3.2**) describes that in Manhattan close to but north of the CBD boundary, there is available capacity in off-street parking facilities. If there are parking capacity constraints, parking operators would likely increase fees for parking. Consistent with the New York’s *City Environmental Quality Review (CEQR) Technical Manual* methodology, parking shortfalls in New York City in areas designated as “Zone 1” and “Zone 2” are not considered adverse effects. These zones include all of Manhattan as well as neighborhoods in Brooklyn, the Bronx, and Queens close to the Manhattan CBD (see **Figure 4D-1** in **Subchapter 4D, “Transportation: Parking”**).

Commenters requested that the CBD Tolling Program include implementation of a residential parking permit program, which would limit parking spaces available to non-residents in areas near but outside the Manhattan CBD. The City of New York does not currently have a program of residential parking permits and a residential parking permit program is not currently included as part of this Project. However, this does not preclude NYCDOT from implementing such a program in the future. See the discussion below of the parking study that NYCDOT would conduct after implementation of the CBD Tolling Program for more information.

It should be noted that certain Manhattan residents receive a partial exemption on the tax paid for privately operated parking garages and lots in Manhattan. The Manhattan Resident Parking Tax Exemption lowers the tax residents pay on rental parking spaces by 8 percent. The current tax on rental parking spaces in Manhattan is 18.375 percent, but it is lowered to 10.375 percent with the exemption. Residents must apply to the New York City Department of Finance to receive the exemption.

POTENTIAL EFFECTS ON PARKING NEAR TRANSIT STATIONS

The Project Sponsors also evaluated the effects of new parking demand on parking lots and garages near transit stations, to determine whether increased transit ridership due to the Project would adversely affect parking at transit stations. Overall, transportation modeling conducted for the Project indicates that ridership on the extensive public transportation system linking the Manhattan CBD with the surrounding region would increase by 1 to 2 percent relative to the No Action Alternative.

Some of these new transit users would drive to transit stations in New York City outside the Manhattan CBD to access transit to complete their journey. Based on the BPM results, the increase in the number of travelers at individual transit facilities in New York City outside the Manhattan CBD would be widely distributed. Within New York City, the 0.7 to 1.6 percent increase in transit usage from the Project would be distributed among commuter rail and subway stations. Subways, which carry 61.9 percent of these commuters, generally do not have dedicated parking facilities and little to no available on-street or off-street parking nearby. Parking at commuter rail stations within New York City is also limited. Moreover, the new vehicle trips at transit facilities would include some customers who would be dropped off without parking and therefore would not add to the demand for parking. For these reasons, the Project Sponsors anticipate a small number of new vehicle trips at transit stations in New York City. The Project Sponsors estimated that at transit stations in New York City, the number of new vehicles would not exceed a screening threshold of 50 vehicles per hour, and consequently determined that no adverse effects on parking conditions would occur.

At commuter rail stations outside New York City, most of the parking facilities are well-used with limited available capacity. **Appendix 4D, "Parking Data for Commuter Rail Stations,"** of the EA presents information on the parking capacity at commuter rail stations throughout the region. The EA concludes that at transit stations that are at or over capacity, the additional vehicles resulting from the Project could not be accommodated. However, based on the transportation modeling results, the increase in commuters at individual stations or park-and-ride facilities would be distributed throughout the region, and the number of new vehicles would not exceed the screening threshold of 50 vehicles per hour used in the analysis.

Therefore, no adverse effects on parking conditions would occur. More information on this analysis is provided in the EA in **Subchapter 4D, “Transportation: Parking.”**

FUTURE PARKING STUDY

The Traffic Mobility Act requires that NYCDOT study the effects of the CBD Tolling Program on parking conditions and availability in and around the Manhattan CBD, following implementation of the Project, and prepare a report describing the results of this study 18 months after the Project commences. The study will collect data on pre-implementation and post-implementation parking conditions in these geographies and other areas of concern for comparison. Based on the findings of the report, NYCDOT will identify and seek to implement potential solutions. Recommendations could range from changes in curb regulations at affected locations to larger-scale initiatives that would require state or local legislation to implement (e.g., a residential parking permit program).

Comment 35: How will traffic changes and diversions due to the Project affect air quality?

The Project Sponsors conducted an analysis of the Project’s effects on air quality throughout the region, including regional and local effects. The analysis included consideration of highway segments throughout the region where traffic volumes would change as a result of the Project; it also included consideration of local intersections where traffic would be most likely to change as a result of the Project. Following completion of the EA, the Project Sponsors conducted additional analysis to further evaluate the potential air quality-related effects of the Project on environmental justice populations. The air quality analysis conducted for the Project indicated that the CBD Tolling Alternative would not result in any violations of National Ambient Air Quality Standards.

REGIONAL EMISSIONS

Regionwide, the CBD Tolling Alternative would reduce regional levels of air pollutants across the 12-county study area as a result of changes in VMT due to the Project. Some counties are predicted to show increases in pollutant emissions, while others would have decreases. This is detailed in the EA in **Chapter 10, “Air Quality,” Section 10.3.2.**

LOCAL INTERSECTIONS

The Project Sponsors reviewed all 102 intersections for which detailed traffic analyses were completed to evaluate the potential effects of the Project on air quality at those locations. Those locations were selected for traffic analysis because they are the locations most likely to see a change in traffic volumes both within and outside the Manhattan CBD—primarily locations near bridges and tunnels connecting to the Manhattan CBD. The analysis showed that the majority of intersections would experience a reduction in traffic delay. Based on the air quality analyses conducted, the level of potential change in air pollutants at the local level at all 102 intersections would not result in adverse effects on local air quality, based on evaluation criteria developed by New York State Department of Transportation. All locations passed the screening criteria used to identify the potential for adverse effects requiring further evaluation. See **Section 10.3.2.2 in Chapter 10** of the EA for more information.

TRAFFIC DIVERSIONS OUTSIDE THE MANHATTAN CBD

Traffic modeling for the Project indicates that the CBD Tolling Alternative would result in some traffic diversions around Manhattan, particularly for through trips, as vehicles seek to avoid the toll. The diversions would be experienced primarily in the Bronx and northern New Jersey and Staten Island, in all tolling scenarios. These diversions would be most pronounced at the approach to the Robert F. Kennedy Bridge in Queens, across the South Bronx and the George Washington Bridge, and into northern New Jersey. Diversions to the south would occur across the Verrazzano-Narrows Bridge and through Staten Island. Diversions would be greatest in Tolling Scenarios D, E, and F, and smallest in Tolling Scenario G.

The Project Sponsors conducted analysis of the potential air quality-related effects of these traffic diversions, including detailed localized analyses of certain highway segments (see **Chapter 10, Section 10.3.2.3**). To address concerns related to the potential effects on local air quality from traffic diversions, the Project Sponsors conducted detailed analyses for three highway segments near environmental justice neighborhoods: I-95 west of the George Washington Bridge in New Jersey, the Cross Bronx Expressway at Macombs Road in the Bronx, and the Robert F. Kennedy (Triborough) Bridge approach in Queens. These segments were selected based on the potential increases in diesel-truck traffic that might occur due to the Project, community concern, and/or existing high volumes of Annual Average Daily Traffic. For these three highway segments, “hot-spot” analyses were conducted to evaluate the increase in particulate matter that would occur as a result of the Project. The analyses for all three highway segments concluded that the CBD Tolling Alternative would not result in adverse effects on air quality at any of those locations because NAAQS would not be exceeded.

In addition, the Project Sponsors evaluated the potential air quality effects on the segment of the FDR Drive near East 10th Street, a highway segment that runs alongside a large public housing complex. No trucks are permitted on the FDR Drive, so increases in diesel-truck traffic are not a concern here. For the FDR Drive segment, the CBD Tolling Alternative would not increase traffic in a magnitude that could result in adverse air quality effects in terms of exceedance of the NAAQS.

ENVIRONMENTAL JUSTICE CONCERNS

Overall, increases in traffic volumes due to diversions would occur near some environmental justice communities, and decreases would occur at other locations near environmental justice communities, depending on the tolling scenario. Following publication of the EA, the Project Sponsors conducted additional analysis related to the effects of additional traffic due to the CBD Tolling Alternative near environmental justice areas. That analysis included consideration of pre-existing air pollution and chronic disease burdens using data from USEPA and Centers for Disease Control and Prevention programs, as well as state and local public health data. The resulting analysis is presented in **Appendix 17D, “Technical Memorandum.”**

The **Technical Memorandum** describes how and why traffic, and particularly truck traffic, contributes to pollutant burdens and the association between these burdens and health outcomes. The analysis also provides a broader context by describing pre-existing pollutant and chronic disease burdens, as well as past land use policies and related trends in pollutant emissions and associated health outcomes. Finally, the

analysis presented in the **Technical Memorandum** identifies which census tracts that are already overburdened within the environmental justice study area, relative to the rest of the nation, would experience Project-related decreases or increases in traffic and resulting emissions.

To identify and describe the burdens experienced by environmental justice communities with pre-existing pollutants or chronic diseases, the analysis relies on data from a number of sources, including USEPA, the Council on Environmental Quality, the Centers for Disease Control, New York State Department of Health, New York City Department of Health and Mental Hygiene, New Jersey Department of Health, and New Jersey Department of Environmental Protection. The analysis identifies those census tracts in the 10-county local study area where pre-existing/cumulative pollutant burdens are at or above the 80th percentile for the United States or existing health burdens are above the 66.66th percentile for the United States. More detail can be found in **Section 17D-5 of Appendix 17D, "Technical Memorandum."**

To identify locations for mitigation to address Project effects, the Project Sponsors determined that it would be appropriate to follow the Council on Environmental Quality's Climate and Economic Justice Screening Tool's (CEJST) methodology for identifying communities in the 10-county local study area that are at or above the 90th percentile for either pre-existing pollutant or chronic disease burdens, and which may also experience increases in truck traffic proximity as a result of the Project. Due to the nature of this region and the distribution of both environmental justice census tracts and the level of pre-existing burdens, the environmental justice census tracts with either pre-existing pollutant or chronic disease indicators that could experience truck traffic increases are the same whether applying the 80th and 66.66th percentiles, or the 90th percentile.³⁹ These areas would benefit from regional mitigation measures described in **Section 17D-7 of Appendix 17D, "Technical Memorandum."**

Figure 18A-5 depicts the environmental justice census tracts where individuals experience at least one pre-existing pollutant burden and at least one pre-existing chronic disease burden at or above the 90th percentile, nationally, and where truck proximity could increase as a result of the Project. The map further categorizes each census tract by the number of indicators for which the tract is in the 90th national percentile or higher. The census tracts shown here have a combined number of indicators at or above the 90th percentile between two and seven; none are at or above the 90th percentile for eight or all nine indicators.

The census tracts where increases or decreases would occur are often in the same neighborhoods and towns. In 63 census tracts with high pre-existing pollutants and health burdens, truck traffic proximity would remain the same (47) or decrease (16) in Tolling Scenario E. Under the same tolling scenario, truck traffic proximity could increase in 56 environmental justice census tracts where at least one pre-existing

³⁹ **Section 17D-5 of Appendix 17D, "Technical Memorandum,"** analyzes pre-existing air pollutant and health burdens at the 80th and 66.66th percentiles to understand the Project effects. **Section 17D-7** analyzes these burdens at the 90th percentiles to determine where mitigation is needed. In essence, the census tracts identified for both of these analyses are co-extensive because all census tracts in which highway truck traffic proximity would increase have at least one pre-existing burden exceeding the 90th percentile. The regional-focused mitigation would benefit these census tracts regardless of the percentile used for analysis.

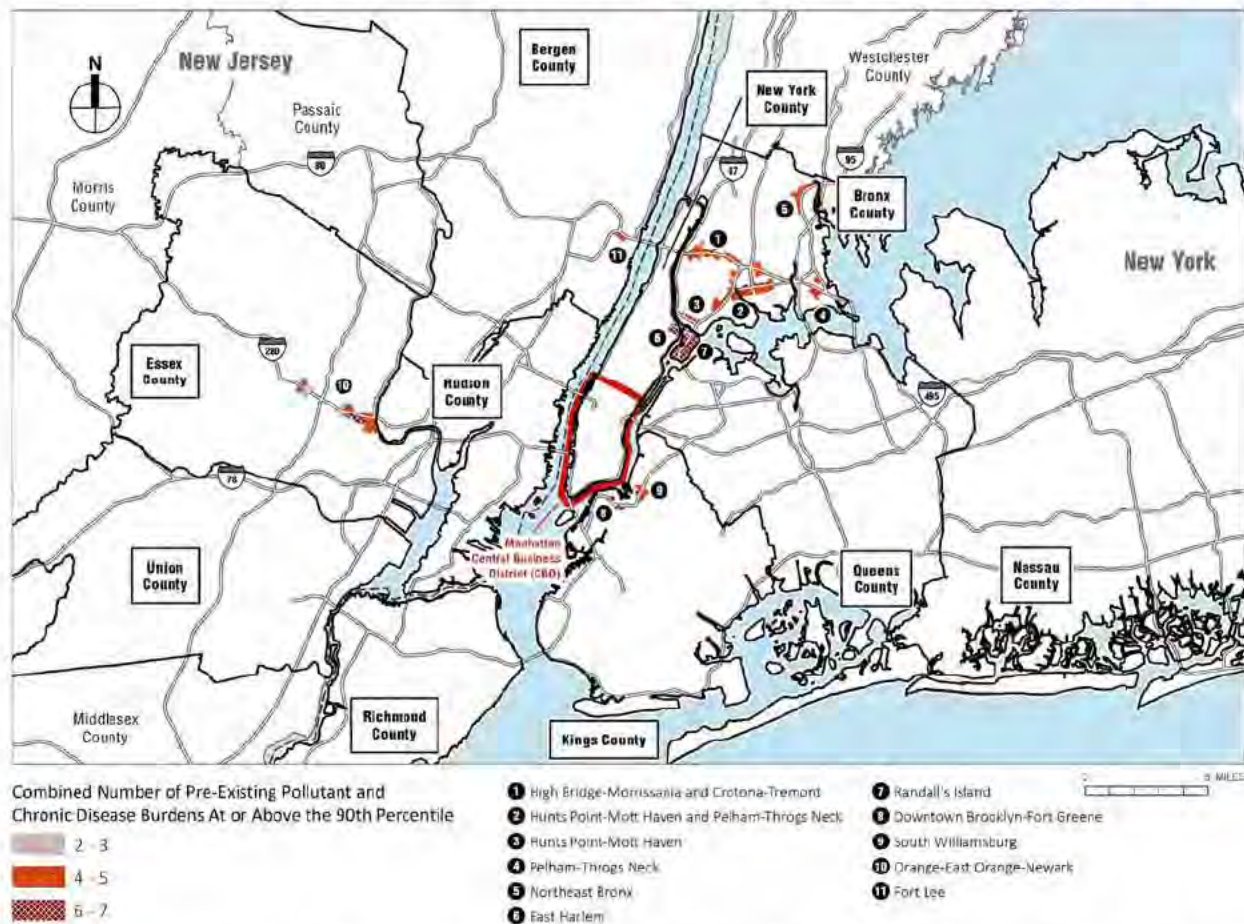
Appendix 18A: Responses to Frequently Received Comments

pollutant burden and at least one pre-existing chronic disease are at or above the 90th percentiles (the locations of increases are listed in **Table 17D-13** of the **Technical Memorandum**).

The specific census tracts that would experience increased or decreased truck traffic change slightly depending on the tolling scenario. The following communities (as illustrated in **Figure 18A-5**, which is taken from the **Technical Memorandum**) could have census tracts that would merit place-based mitigation for truck emissions: High Bridge, Morrisania and Crotona, Tremont, Hunts Point, Mott Haven, Pelham, Throgs Neck, Northeast Bronx, East Harlem, Randall's Island, Downtown Brooklyn, Fort Greene, South Williamsburg, Orange, East Orange, Newark, and Fort Lee (except in Tolling Scenario G).

For non-truck traffic, mitigation was identified for the FDR Drive adjacent to the Lower East Side and Lower Manhattan. Modeling indicated that the increase in this area could be mitigated by ensuring that vehicles traveling to Manhattan on the Brooklyn Bridge that drive north on the FDR Drive and use the exit at East Houston Street to immediately turn left and head back south on the FDR Drive would be tolled, thus discouraging diversions of non-truck traffic. This mitigation will be implemented as part of the package of place-based mitigation measures.

Figure 18A-5. Environmental Justice Census Tracts with High Pre-Existing Pollutant and Chronic Disease Burdens Where Truck Traffic Proximity Could Potentially Increase (Tolling Scenario E)



Source: USEPA National Air Toxics Assessment (NATA) and Agency Air Quality System via EIScreen 2021 data; CDC PLACES Estimates 2020 via EJI 2022 data; BPM, WSP 2021.

Notes: Percentiles are national. Census Tract 3009, Nassau County not shown. Potential truck volume increases and decreases on roadways within the tract would ultimately cancel each other out and result in no change of truck traffic proximity for the residential populations within the tract.

MONITORING AND MITIGATION

Certain areas in the Bronx, notably Hunts Point and High Bridge, have many census tracts with high pre-existing burdens. Though the increase in traffic due to the Project at some of these locations would be more modest (e.g., along the Cross Bronx Expressway), when combined with the pre-existing burdens, these areas suggest a high priority for place-based mitigation measures. Other locations, particularly East Harlem, do not have a large number of tracts with pre-existing pollutant or chronic disease burdens, but do have a larger Project-related increase in truck traffic and therefore also merit place-based mitigation measures. Locations with neither high pre-existing burdens, nor large increases in truck traffic, that may experience adverse effects from Project-related truck diversions will be addressed more broadly through regional mitigation described earlier.

Appendix 18A: Responses to Frequently Received Comments

The Project Sponsors have committed to a package of regional and place-based mitigation measures to these potential adverse effects on environmental justice populations, which is discussed in **Comment 39** of this chapter.

In addition, as described in the EA released in August 2022, TBTA will coordinate with New York City Department of Health and Mental Hygiene (DOHMH) to expand the New York City Community Air Survey network of air quality monitors. The monitors will be used to determine whether changes in air pollution occurring after Project Implementation can be attributed to changes in traffic occurring after implementation of the Project. The Project Sponsors will select the additional monitoring locations in consideration of air quality analysis in the EA and input from environmental justice stakeholders. New York State Department of Environmental Conservation (NYSDEC) and other agencies conducting monitoring will also be consulted prior to finalizing the monitoring approach. The Project Sponsors will monitor air quality prior to implementation (setting a baseline), and two years following implementation. Following the initial two-year post-implementation analysis period, and separate from ongoing air quality monitoring and reporting, the Project Sponsors will assess the magnitude and variability of changes in air quality to determine whether more monitoring sites are necessary. Data collected throughout the monitoring program will be made available publicly as data becomes available and analysis is completed. Data from the real-time monitors will be available online continuously from the start of pre-implementation monitoring.

Finally, as an independent action, MTA is currently transitioning its bus fleet to zero-emission buses, which would reduce air pollutants and improve air quality near bus depots and along bus routes. TBTA coordinated with MTA NYCT, which is committed to prioritizing service to traditionally underserved communities and particularly for areas with concerns related to air quality and climate change, and has developed a new approach that actively incorporates these priorities in the deployment phasing process of the bus-fleet transition. Based on feedback and concerns raised during public outreach for the Project related to environmental justice, MTA NYCT would prioritize transitioning the fleet at two bus depots in Upper Manhattan and the Bronx: the Kingsbridge Depot and Gun Hill Depot, when electric buses are received in MTA's next major procurement of battery electric buses, which began in late 2022. Both of these depots are located within, and provide service to environmental justice neighborhoods.

If the Project receives Federal approval, the Project Sponsors will implement mitigation measures to address adverse effects to communities that are already overburdened by pre-existing air pollution and chronic diseases, relative to national percentiles. Mitigation measures will include both regional measures, which will reduce truck diversions and reduce emissions, and place-based measures, to reduce emissions and improve air quality in areas with the greatest potential effect due to the Project, based on the actual tolling structure selected. To fund these mitigation measures the Project Sponsors have committed \$155 million over 5 years. The Project Sponsors commit to these measures, regardless of the tolling structure eventually adopted. An adaptive management approach will be used which will include monitoring the efficacy of mitigation, stakeholder consultation, and adjustments as warranted. An additional \$5 million has been allocated for mitigation and enhancement measures related to monitoring

across other topics, along with \$47.5 million for the low-income toll discount. These mitigation measures are further described in response to **Comment 39**.

Comment 36: How will the Project affect minority and low-income populations?

FHWA and the Project Sponsors evaluated the CBD Tolling Alternative's potential effect on minority and low-income populations, in comparison to the effects on the general population. That analysis included consideration of the effects of the new toll on environmental justice populations who drive and would pay the new CBD toll. It also included consideration of the effects of changes in traffic volumes on environmental justice populations living near the affected roadways. At this time, the actual toll schedule, including exemptions, discounts, and crossing credits, has not been finalized (see response to **Comment 18**).

ENVIRONMENTAL JUSTICE POPULATIONS WHO WOULD PAY THE CBD TOLL

For the 28-county regional study area that is the main catchment area for trips to the Manhattan CBD, population characteristics include the following:

- More than half of the population of the regional study area (63 percent) identifies as minority. Approximately 47 percent of the people who travel to the Manhattan CBD for work identify as minority populations. Approximately 10 percent of the minority commuters to the Manhattan CBD, or close to 73,000 people, use cars to make their trip.
- About one-third of the population of the regional study area (31 percent) is low-income. About 14 percent of the commuters to the Manhattan CBD (about 219,000 people) are low-income. Approximately 7 percent of those people, a total of approximately 16,100 people, drive to the Manhattan CBD for work.
- All areas of New York City, other than a neighborhood in Queens that is not an environmental justice area (Breezy Point, Queens) are within 1/2 mile of transit services. Approximately 440,000 people (or about 5.2 percent of the city's 8.4 million residents) live in areas of New York City that are more than 1/2 mile from faster public transportation modes (commuter rail, subway, or express bus or SBS service), and approximately 33,900 of them commute to the Manhattan CBD. Approximately 5,200 (15 percent) of these commuters to the Manhattan CBD travel by car.
- New York City taxi and FHV drivers licensed by the TLC predominantly identify as minority.

With the CBD Tolling Alternative, most people, including minority and low-income populations, would continue to use public transportation to travel to and from the Manhattan CBD and would not be adversely affected by the new toll.

Most people who currently drive to the Manhattan CBD have alternative travel options to avoid the CBD toll. However, for some people, switching to transit is not a reasonable option because they have poor access to transit, commuting by transit is inefficient with long travel times, they have work hours during times of limited transit service, or they need access to a private automobile for their work. For these individual drivers who do not have reasonable alternatives to private vehicle, the Project would increase

their cost of travel to the Manhattan CBD. The size of cost increase would depend on the tolling scenario and each driver's specific route and travel patterns.

The analysis concludes that the cost of the new toll would not result in a disproportionately high and adverse effect on minority drivers who have no reasonable alternative mode for reaching the Manhattan CBD other than private vehicle. The analysis concludes that the effect on these drivers would be the same effect as experienced by the general population and would not be predominantly borne by a minority population or be more severe or greater in magnitude for the minority population than for the general population. Approximately 10 percent of the minority commuters to the Manhattan CBD use cars to make their trip. This is similar to the overall population of all commuters, of whom approximately 10.2 percent use cars. (See **Table 17-6** in the EA in **Chapter 17, "Environmental Justice"**).

The analysis concludes that the cost of the new toll would not result in a disproportionately high and adverse effect on taxi and FHV drivers in New York City, comprised largely of minority populations, with the updated mitigation in the Final EA. Specifically, TBTA will ensure that a toll structure with tolls of no more than once per day for taxis or FHVs is included in the final CBD tolling structure. This will avoid a disproportionately high and adverse effect on taxi and FHV drivers from the Project. See also response to **Comment 38**.

The analysis concludes that the CBD Tolling Alternative would not result in disproportionately high and adverse effects on low-income drivers who currently drive to the Manhattan CBD with the inclusion of new mitigation measures for the Final EA. For these drivers, the effect of that cost would be appreciably more severe than the effect on the non-low-income population, because the cost of the toll would represent a larger proportion of each driver's available income. The specific cost associated with the new toll would vary for each driver, depending on the route, time of day, frequency of the trip, and the tolling scenario. With the addition of new mitigation, including a discount for frequent low-income drivers, the Final EA concludes there would not be a disproportionately high and adverse effect on low-income drivers.

Chapter 17 of the EA, **"Environmental Justice,"** presents the analysis the Project Sponsors conducted and describes the mitigation measures that the Project Sponsors will implement. See also response to **Comment 37** and **Comment 39**.

ENVIRONMENTAL JUSTICE POPULATIONS ALREADY OVERBURDENED BY PRE-EXISTING AIR POLLUTION AND CHRONIC DISEASES WHO LIVE NEAR ROADWAYS WHERE TRUCK TRAFFIC WOULD CHANGE

As a result of traffic diversions as drivers seek to avoid the new toll, some environmental justice communities would experience lower traffic volumes; others would see increases in traffic. Following publication of the EA in August 2022, and based on public comments and input from the Environmental Justice Technical Advisory Group, the Project Sponsors conducted additional analysis related to these potential diversions.

The analysis, presented in **Appendix 17D, "Technical Memorandum,"** describes how and why traffic, and particularly truck traffic, contributes to pollutant burdens and the association between these burdens and health outcomes. Specifically, vehicles contribute to air pollutants like carbon monoxide, mobile source air

toxics, nitrogen oxides, and particulate matter through brake and tire particulates, dispersal of roadway dust, and through the burning of fossil fuels in combustion engines.

Although all motor vehicles produce air pollutants, emissions from trucks are of particular concern to near-road air quality, in part because of the pollutants they emit, but also because they disproportionately contribute more emissions than other types of vehicles. Thus much of the analysis focuses on truck traffic; however, to ensure that the full range of effects is explored, **Appendix 17D, "Technical Memorandum"** also explores effects of the Project on non-truck traffic.

The analysis also provides a broader context by describing pre-existing pollutant and chronic disease burdens, as well as past land use policies and related trends in pollutant emissions and associated health outcomes. Finally, the analysis presented in the **Technical Memorandum** identifies which census tracts that are already overburdened within the environmental justice study area would experience Project-related decreases or increases in traffic, particularly truck traffic, and resulting emissions.

Appendix 17D, "Technical Memorandum," presents the analysis the Project Sponsors conducted and describes the mitigation measures that the Project Sponsors will implement to address potential adverse effects on certain communities already overburdened by pre-existing air pollution and chronic diseases. See also response to **Comment 35**.

Comment 37: How will the Project Sponsors mitigate the economic effect to low-income residents?

For low-income travelers, a wide variety of discounted and lower cost transportation options are currently available in the New York City metropolitan region, including:

- **Transit Fare Discount for Individuals in Low-Income Households.** Beyond the Manhattan CBD, New York City residents between the ages of 18 and 64 who reside in a household with an income below the Federal poverty threshold, and are not receiving full carfare from the Department of Social Services/Human Resources Administration or any other New York City agency, are eligible for the Fair Fares program, which allows travel at half the full fare cost on MTA subway; local, limited, and SBS buses; and Access-A-Ride paratransit. As of January 2023, there were more than 275,500 people enrolled in the Fair Fares program.
- **Transit Fare Discount for Persons with Disabilities and Those 65 Years of Age and Older.** Even broader geographically, MTA subway, bus, and rail riders who are 65 and older or are persons with disabilities are eligible for a Reduced Fare program, which allows travel on transit at half the full fare cost. This program is not restricted to New York City residents. Nearly 1.4 million MTA customers are enrolled in the Reduced Fare program, and as of January 2023, more than 925,000 of those enrolled have been active in the past 18 months.
- **Student Transit Fare Discount.** MTA works with the New York City Department of Education so that students have access to education. Student MetroCards are distributed by schools to students whose home is 1/2 mile or farther from their school. These MetroCards allow three free rides each school day

Appendix 18A: Responses to Frequently Received Comments

between 5:30 a.m. and 8:30 p.m., including free transfers between buses or between the subway and local, limited, and SBS buses. For the 2021-2022 school year, NYCT distributed more than 3,425,000 Student MetroCards to the NYC Board of Education. These cards are provided for students for transportation to and from school (one MetroCard per semester) and for school-approved extracurricular activities.⁴⁰

- **Free Ferry Service.** The Staten Island Ferry, which operates 24 hours a day, 7 days a week, every day of the year, runs free ferry service from Staten Island to the Manhattan CBD. The ferry carries approximately 25 million passengers annually on its 5.2-mile route.⁴¹
- **Reduced-Fare Bike Share.** Citi Bike, in partnership with Healthfirst and NYCDOT, provides reduced cost membership of \$5/month (roughly one-third the typical membership) for low-income individuals 16 years and older who are residents of New York City Housing Authority facilities or receive Supplemental Nutrition Assistance Program (SNAP) benefits. For those who cannot bike for their entire commute, Citi Bike can serve as a “first-mile/last-mile” mode to access transit. In 2022, there were more than 15,000 people enrolled in Citi Bike’s low-fare membership program, and those enrolled took 50 percent more rides than full-priced members, a testament to its utility for low-income riders.⁴²
- **24-Hour Public Transportation Widely Available.** As described in other chapters of this EA, New York City and the surrounding region has an extensive regional transportation network that operates 7 days a week all year long. The services within New York City operate 24 hours a day.
- **E-ZPass Payment Options.** To make the convenience of E-ZPass available for as many customers as possible, TBTA offers a Pay-Per-Trip option and a Reload Card for customers without credit cards to replenish their E-ZPass. About 250,000, or 6 percent of all MTA E-ZPass accounts, are Pay-Per-Trip accounts. Establishing an E-ZPass account ensures customers pay the lowest applicable tolls and can qualify for resident rebates on existing facilities. For example, there are over 200,000 transponders associated with over 135,000 accounts enrolled in the Staten Island Resident Rebate program, which provides drivers with an effective toll rate of \$2.75 (the cost of a one-way MTA transit fare) in each direction on the Verrazzano-Narrows Bridge.⁴³
- **MTA City Ticket Program.** MTA established the reduced-cost, flat-fare City Ticket to encourage travel on Long Island Rail Road and Metro-North Railroad between stations within New York City. Currently, City Tickets cost \$5.00 and are good for one-way travel during off-peak hours. MTA will soon expand the City Ticket program to include peak hours with a modestly higher peak rate, to be adopted by the MTA Board. By comparison, peak hour travel tickets currently can cost as much as \$10.75 on Long Island Rail Road and \$9.75 on Metro-North Railroad. This change will make faster travel between the

⁴⁰ MTA NYCT analysis, 2022.

⁴¹ NYCDOT, “Staten Island Ferry Facts.” <https://www.nyc.gov/html/dot/html/ferrybus/ferry-facts.shtml#:~:text=The%20Ferry%20carries%20approximately%2025,day%2C%20365%20days%20a%20year>.

⁴² The Better Bike Share Partnership, “This Summer, NYC Youth Rode Citi Bike to Work.” <https://betterbikeshare.org/2022/09/27/this-summer-nyc-youth-rode-citi-bike-to-work/>.

⁴³ TBTA analysis, 2022.

Manhattan CBD and neighborhoods in the Bronx, Brooklyn, and Queens more affordable, and will benefit more than 10,000 trips on an average weekday.⁴⁴

In addition to these existing programs offered or supported by the Project Sponsors, the Project Sponsors will implement the following mitigation measures to address the potential adverse effect of the CBD Tolling Program on low-income drivers:

- **Low-Income Discount Plan:** TBTA will ensure that for the first five years of the Project, the final tolling structure includes a discounted toll rate for low-income frequent drivers, who could include, for example, commuters to the CBD or people who travel regularly to the CBD for medical appointments. The discounted toll rate will be in place for drivers who have either a Federal adjusted gross income reported on their income tax return for the prior calendar year in the amount of no more than \$50,000 or proof of enrollment in a qualifying government-provided income-based program (such as the Supplemental Nutrition Assistance Program (SNAP) or the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)).⁴⁵ Through the use of their E-ZPass tag and an associated Low-Income Discount Plan on their E-ZPass account, qualifying drivers will benefit from a 25 percent discount on the full CBD E-ZPass toll rate for the applicable time of day after the first 10 trips in each calendar month. (This discount will not include the overnight period, which will already be deeply discounted.)
- **Further Reduced Overnight CBD Toll:** All tolling scenarios in the EA include an overnight rate of either 50 or 60 percent of the peak rate. As described in further detail in response to **Comment 39**, TBTA will ensure the overnight toll rate is reduced further in the final CBD tolling structure, which will benefit low-income drivers traveling during this time.
- **Tax Credit for Tolls Paid:** The Project will include a tax credit for CBD tolls paid by residents of the Manhattan CBD whose New York adjusted gross income for the taxable year is less than \$60,000. TBTA will coordinate with the New York State Department of Taxation and Finance (NYSDTF) so that documentation that may be needed for those eligible for the New York State tax credit is available.⁴⁶
- **Education/Outreach/Coordination on the Tax Credit:** TBTA will post information related to the tax credit on the Project website, with a link to the appropriate location on the NYSDTF website to guide eligible drivers to information on claiming the credit.
- **Elimination of the E-ZPass Tag Deposit Fee:** For all drivers, the best way to reduce toll costs associated with the CBD Tolling Program would be to use E-ZPass, since toll rates would be lower for those who use E-ZPass than for those who do not. As noted, TBTA already offers a Pay-Per-Trip option and a Reload

⁴⁴ Office of New York Governor Kathy Hochul. 2023. "Governor Hochul Announces Public Transit Expansions to Increase Access, Affordability and Safety." Jan. 10, 2023. <https://www.governor.ny.gov/news/governor-hochul-announces-public-transit-expansions-increase-access-affordability-and-safety>.

⁴⁵ The Project Sponsors commit to a five-year period for the discounted toll rate to allow time for low-income frequent drivers to try alternatives and/or adjust their travel habits as capital projects increase reliability and access.

⁴⁶ Although some people might not earn enough annually to have to file a tax return, they may still opt to submit a tax return to claim the credit. Free tax filing programs are available for qualifying individuals through the NYS Department of Taxation and Finance and the NYC Department of Consumer and Worker Protection (DCWP).

Appendix 18A: Responses to Frequently Received Comments

Card for cash customers to replenish their E-ZPass. However, there is a \$10 refundable deposit required for customers who do not have a credit card account linked to their account. Recognizing that these tend to be low-income customers, TBTA will eliminate the \$10 E-ZPass tag deposit fee for customers without credit card backup. Importantly, in many cases, once these customers have E-ZPass, they will also benefit from lower toll rates (compared to Tolls by Mail) on other facilities, including but not limited to the Port Authority of NY & NJ tunnels and bridges, TBTA's bridges and tunnels, the New York State Bridge Authority bridges, and the New York State Thruway, thus reducing their overall toll expenditure. There are more than 815,000 MTA E-ZPass accounts that are not linked to a credit card and require the tag deposit.⁴⁷

- **Enhanced Promotion of Existing E-ZPass Payment and Plan Options:** TBTA will provide enhanced promotion of existing E-ZPass payment and plan options, including the ability for drivers to pay per trip (rather than a pre-loaded balance), refill their accounts with cash at participating retail partners, and discount plans already in place, about which they may not be aware.
- **Education/Outreach on Transit Discounts:** TBTA will coordinate with MTA to provide outreach and education on eligibility for existing discounted transit fare products and programs, including those for individuals 65 years of age and older, those with disabilities, and those with low incomes, about which many may not be aware.
- **Establishment of an Environmental Justice Community Group:** The Project Sponsors commit to establishing an Environmental Justice Community Group that will meet on a quarterly basis, with the first meeting taking place prior to Project Implementation. The Project Sponsors will continue to provide meaningful opportunities for participation and engagement related to environmental justice concerns by sharing updated data and analysis, listening to concerns and seeking feedback on the toll setting process.

The Project Sponsors have also committed to the following enhancement: TBTA will coordinate with MTA NYCT to improve bus service in areas identified in the EA as the Brooklyn and Manhattan Bus Network Redesigns move forward. New York City's buses serve a greater share of low-income and minority households compared to other modes of transportation, including subways. MTA NYCT, when redesigning its bus networks, took into consideration areas with higher rates of low-income and minority households. The recently implemented Bus Network Redesigns in Staten Island and the Bronx have been well-received. Since implementation of the redesigns, bus speeds in Staten Island have gotten 5 percent faster on weekdays overall, with the AM peak weekdays speeds 9 percent faster. And on Bronx bus routes speeds are now the highest in the system, outperforming the system-wide average by 7 percent. Not only are customers reporting satisfaction with these changes, the routes are attracting new riders, with increased ridership on many of the changed routes.⁴⁸ Network redesigns in Queens and Brooklyn are progressing. TBTA commits to working with NYCT to address areas identified in the EA where bus service could be improved as the Brooklyn and Manhattan Bus Network Redesigns move forward.

⁴⁷ TBTA analysis, 2023.

⁴⁸ MTA NYCT analysis, 2022.

The EA includes an analysis of the potential effects of the CBD Tolling Alternative on low-income drivers in Chapter 17, "Environmental Justice."

Comment 38: How will the Project affect taxi and FHV drivers?

The Project Sponsors evaluated the effect of the CBD Tolling Alternative on taxi and FHV drivers. The tolling scenarios they evaluated in the EA includes some tolling scenarios that would have exemptions for taxis and/or FHV drivers and/or limits ("caps") to the number of times per day they would be subject to the toll, and other tolling scenarios without exemptions and/or caps.

Tolling Scenarios that would toll taxis and/or FHV drivers more than once per day (unmodified Tolling Scenarios A, D, and G; and Tolling Scenarios C and E for FHV drivers) would adversely affect taxi and/or FHV drivers in New York City, as follows:

- The cost of the new toll would adversely affect taxi and FHV drivers, who would need to pay the CBD toll, including at the start of their workday, in tolling scenarios that toll their vehicles more than once a day.
- The new CBD toll would reduce VMT associated with taxis and/or FHV drivers in Manhattan. Since the income of taxi and FHV drivers is directly related to the miles they travel with paying customers, this would reduce the income of taxi and FHV drivers and this reduction would be large enough that job losses could occur in tolling scenarios that toll their vehicles more than once a day.

In Tolling Scenarios B and F, and the modified Tolling Scenarios A, D, and G, these adverse effects would not occur. More information on the analysis the Project Sponsors conducted is provided in the EA in Chapter 17, "Environmental Justice."

As updated in the Final EA, TBTA will ensure that a toll structure with tolls of no more than once per day for taxis or FHV drivers is included in the final CBD toll structure. This will avoid a disproportionately high and adverse effect on taxi and FHV drivers from the Project. (This commitment would not preclude New York City taxi and FHV drivers from benefiting from the low-income driver mitigation measures, including the Low-Income Discount Plan for their vehicles that are not licensed as taxis or FHV drivers, provided that they can demonstrate eligibility. For more information on mitigation for low-income drivers, see the response to **Comment 37**.)

For more information, see Chapter 17, "Environmental Justice," of the EA, which evaluates the effects of the Project on environmental justice populations, including minority populations and low-income populations. See response to **Comment 39** for further information on the commitments the Project Sponsors are making in addition to those that were described in the EA.

Comment 39: What mitigation and enhancement measures will the Project Sponsors implement, in addition to those that were described in the EA?

The EA included a number of mitigation and enhancement measures, which are shown in the **Executive Summary, Table ES-4**, as well as in Chapter 16, "Summary of Effects," **Table 16-1**. During the public review and comment period, the Project Sponsors made changes to several of these to further clarify or provide specificity,

Appendix 18A: Responses to Frequently Received Comments

These are now provided in the Final EA (**Table ES-5** and **Table 16-1**), with changes indicated in a combination of bold, italics, and brackets (e.g., *[this is how edited text is marked]*). In addition, the Final EA now includes new tables (**Table ES-6** and **Table 16-2**) summarizing how the mitigation measures will be implemented.

The Project Sponsors also added new enhancement and mitigation commitments in the Final EA. These include the creation of a Small Business Working Group (SBWG): the Project Sponsors commit to establishing a SBWG that will meet 6 months prior and 6 months after Project implementation, and annually thereafter, to solicit ongoing input on whether and how businesses are being affected (see **Chapter 6, "Economic Conditions"**). They also include the further reduction of overnight toll rates: TBTA will ensure the overnight toll for trucks and other vehicles is reduced to at or below 50 percent of the peak toll from at least 12:00 a.m. to 4:00 a.m. in the final toll structure; this will also benefit some workers and businesses.

To address a potential disproportionately high and adverse effect on environmental justice populations, the Project Sponsors have committed that the final CBD toll structure will have tolls of no more than once per day for taxis or FHVs, and a Low-Income Discount Plan for low-income drivers (see **Chapter 17, "Environmental Justice"**). The further reduced overnight rates noted above will also benefit low-income drivers traveling during this time.

In addition, the Project Sponsors have committed to a package of mitigation measures to address potential adverse effects related to diversion of traffic to areas where environmental justice populations are already overburdened by existing pollution burdens or adverse health burdens. The Project Sponsors have committed to multiple regional mitigation measures to reduce truck diversions and reduce emissions, as well as multiple place-based measures to reduce emissions and improve air quality in areas with the greatest potential effect due to the Project. These are summarized in **Table 18A-4**. To fund these mitigation measures, the Project Sponsors have committed \$155 million over five years. The Project Sponsors commit to these measures, regardless of the tolling structure eventually adopted. An adaptive management approach will be used which will include monitoring the efficacy of mitigation, stakeholder consultation, and adjustments as warranted. An additional \$5 million has been allocated for mitigation and enhancement measures related to monitoring across other topics, along with \$47.5 million for the low-income toll discount.

The specific census tracts that would experience increased or decreased truck traffic change slightly depending on the tolling scenario, but the communities largely remain the same across tolling scenarios. The following communities could have census tracts that would merit place-based mitigation: High Bridge, Morrisania and Crotona, Tremont, Hunts Point, Mott Haven, Pelham, Throgs Neck, Northeast Bronx, East Harlem, Randall's Island, Lower East Side/Lower Manhattan, Downtown Brooklyn, Fort Greene, South Williamsburg, Orange, East Orange, Newark, and Fort Lee (except for Tolling Scenario G).

After toll rates are set, a process that includes both additional analyses and community input will take place to determine the sites of place-based mitigation (e.g., in which schools to install air filtration units, or on what roadways to plant vegetation). This will require coordination between the Project Sponsors, the Environmental Justice Community Group (representing the 10-county environmental justice study area),

the relevant communities receiving the place-based mitigation, and local implementing agencies, and will include needs assessment and feasibility screening to determine the range of possibilities. The Project Sponsors will work with the implementing agencies through existing public engagement and participation processes to then prioritize and select the specific locations. The specific place-based mitigation sites will be made available to the public by a posting on the Project website, as well as direct emails to members of the public who have signed up to receive information about the Project.

Table 18A-4. Regional and Place-Based Mitigation Measures

MITIGATION MEASURES	BENEFIT AND RESULT OF MITIGATION	5-YEAR FUNDING¹	RELEVANT LOCATION(S)	FUNDING SOURCE	IMPLEMENTATION LEAD
Regional Mitigation					
Further reduced overnight toll	Minimize/avoid truck diversions	\$30 million	10-county environmental justice study area	CBD Tolling Program	TBTA
Expand NYC Clean Trucks Program	NOx and PM2.5 reductions from ~500 new clean trucks	\$20 million		CBD Tolling Program	NYCDOT
Expand NYCDOT Off-Hours Delivery Program	Safety and emissions reduction benefits resulting from reduced truck traffic during the day	\$5 million		CBD Tolling Program	NYCDOT
Place-Based Mitigation					
Toll vehicles traveling northbound on the FDR Drive that exit at East Houston Street and then travel southbound on FDR Drive	25 to 35 percent of the non-truck traffic increases on the FDR Drive could be mitigated	N/A	FDR Drive between the Brooklyn Bridge and East Houston Street	N/A	TBTA
Replacement of Transport Refrigeration Units (TRUs) at Hunts Point Produce Market	Major NOx and PM2.5 reductions from the replacement of up to 1,000 TRUs	\$15 million²	Hunts Point	MTA CMAQ Program	NYCDOT
Implement Electric Truck Charging Infrastructure	NOx and PM2.5 reductions from electric vehicles using 35 new chargers (at seven stations)	\$20 million	After toll rates are set, a process that includes both additional analyses and community input will take place to determine specific locations	\$10 million Federal CRP + \$10 million CBD Tolling Program	NYSDOT
Install Roadside Vegetation to Improve Near-Road Air Quality	Improves near-road air quality by pollutant capture from ~4,000 trees and ~40,000 shrubs	\$10 million		CBD Tolling Program	TBTA with Relevant State and Local Agencies
Renovate Parks and Greenspace in Environmental Justice Communities	Increases overall community well-being, 2-5 park/greenspace renovations depending on size and complexity.	\$25 million		CBD Tolling Program	TBTA with Relevant State and Local Agencies
Install Air Filtration Units in Schools Near Highways	Removes air pollutants from classrooms. 25-40 schools depending on school size and complexity of existing HVAC system.	\$10 million		CBD Tolling Program	TBTA with Relevant State and Local Agencies
Establish Asthma Case Management Program and Bronx Center	Reduces hospitalizations and doctor visits, decreases days and nights with symptoms and missed school days – program expansion up to 25 schools	\$20 million		CBD Tolling Program	NYC DOHMH

Notes:

¹ An additional \$5 million has been allocated for mitigation and enhancement measures related to monitoring across other topics, along with \$47.5 million for the low-income toll discount discussed above. Enhancement measures include air quality monitoring that will expand NYC's existing monitoring network. Locations will be selected in consideration of the traffic and air quality analyses in the EA and in coordination with environmental justice stakeholders and relevant state and local agencies. This will complement the regional and place-based mitigation measures related to traffic diversions outlined here (see **Chapter 10, "Air Quality,"** for details).

² After three years, any remaining funds designated for TRU replacements may also be used for clean truck replacement vouchers through the NYC Clean Trucks Program.

CENTRAL BUSINESS DISTRICT (CBD) TOLLING PROGRAM

Appendix 2, Project Alternatives

2023

Contents

2A, Previous Studies and Concepts Considered

2B, MTA Reform and Traffic Mobility Act

- New York State Vehicle and Traffic Law as amended, Title 8, Respective Powers of State and Local Authorities
 - Article 38, Regulation of Traffic by Public Authorities and Commissions, Section 1630(4)
 - Article 44-c, Central Business District Tolling Program (Sections 1701 – 1706)
- New York State Public Authorities Law as amended, Article 3, Bridge and Tunnel Authorities, Title 3, Triborough Bridge Authority
 - Section 553(9-s and 12-a) – Powers of the authority
 - Section 553-j – Additional powers and provisions in relation to central business district tolling program
 - Section 553-k – Traffic mobility review board
 - Section 566-a – Tax contract by the state
- New York State Public Officers Law, Article 6, Freedom of Information Law, Section 87(2)(p)
- New York State Tax Law as amended, Article 22, Personal Income Tax, Part 1, General, Section 606 – Credits Against Tax

2C, Memorandum of Understanding between TBTA and NYCDOT

2D, CBD Tolling Program Signage

2E, Definition of Tolling Scenarios

2A, Previous Studies and Concepts Considered

For more than 45 years, State and City of New York officials and stakeholder and advocacy groups have studied various concepts for addressing traffic congestion in Manhattan, including introducing tolls. These concepts, and associated studies, are described here and summarized in **Table 2A-1** at the end of this section.

In 1973, then-New York State Governor Nelson Rockefeller and then-New York City Mayor John Lindsay submitted to the U.S. Environmental Protection Agency, as part of New York State's plan to achieve compliance with the Clean Air Act, a proposal for a congestion management plan that included tolls on the East and Harlem River Bridges. According to an article in *The New York Times* when the plan was canceled,¹ the U.S. Environmental Protection Agency determined that other measures being taken by the state and city to invest in its public transit system made tolling the bridges unnecessary at that time. Other traffic control measures were put into effect at that time including bus and bicycle lanes, a reduction in on-street parking spaces, and introduction of vehicle inspections related to emissions.

In April 2007, then-Mayor Michael Bloomberg released New York City's PlaNYC, a long-term plan that included a congestion pricing proposal for the area of Manhattan south of 86th Street (Item 2 in **Table 2A-1**). The revenues generated by the congestion fee were to be used to fund capital investments in the transit network.² In this concept, passenger vehicles and trucks entering, leaving, and operating within the area of Manhattan south of 86th Street during the business day (weekdays 6:00 a.m. to 6:00 p.m.) would pay a daily fee. Emergency vehicles, transit vehicles, taxis, FHVs, and vehicles with handicapped license plates would be exempt. Roads on the periphery (the West Side Highway/Route 9A and the Franklin D. Roosevelt [FDR] Drive) would not be included in the zone. The tolling concept included a credit provided to vehicles that paid inbound tolls at bridges or tunnels. This concept was predicted to result in a 6.3 percent reduction in average vehicle-miles traveled (VMT) in the area of Manhattan south of 86th Street.

In response to the proposal included in PlaNYC, in July 2007, the State of New York created the New York City Traffic Congestion Mitigation Commission, a 17-member body appointed by the governor based on recommendations from the New York City mayor and leaders in the New York State Assembly, New York State Senate, and New York City Council. The mandate of the commission was to study and evaluate approaches to reducing congestion in the busiest parts of Manhattan, including the PlaNYC proposal and other concepts to be developed by the new commission, and recommend a comprehensive traffic congestion mitigation plan. The legislation that established the commission required any recommendation to achieve at least a 6.3 percent reduction in average VMT in the area south of 86th Street, which was the amount identified by PlaNYC as achievable with that concept. Building from the PlaNYC proposal, the Traffic Congestion Mitigation Commission evaluated congestion reduction concepts for the area of Manhattan south of 86th Street (Items 3a through 3f in **Table 2A-1**) and used the 6.3 percent reduction in average VMT in the area south of 86th Street as a screening threshold for the additional concepts under consideration.

¹ *The New York Times*. "City Drops Proposal to Charge Bridge Tolls." September 15, 1981.

² The City of New York, Mayor Michael R. Bloomberg. April 2007. *PlaNYC: A Greener, Greater New York*. http://www.nyc.gov/html/planyc/downloads/pdf/publications/full_report_2007.pdf.

The Traffic Congestion Mitigation Commission studied a range of different concepts for reducing congestion (Item 3a in **Table 2A-1**), including the following:

- Providing telecommuting incentives
- Increasing the cost of parking in the business district
- Reducing the use of government-issued parking permits
- Providing additional taxi stands to reduce cruising
- Increasing cab fares and fees charged to cabs
- Raising tolls or implementing variable tolls on existing facilities
- Adding East River bridge tolls
- Rationing license plates
- Instituting mandatory carpooling
- Creating High-Occupancy Toll lanes
- Establishing congestion pricing with the following parameters:
 - With a 60th Street northern boundary
 - With an 86th Street northern boundary
 - With no intra-zonal charge and no free periphery
 - With variable charges or extended hours
 - With an exemption for hybrid vehicles
 - With a credit for other tolls paid
- Introducing various truck restrictions

The Traffic Congestion Mitigation Commission compared this wide range of concepts against the following:

- Evaluation criteria related to reductions in VMT
- Social and environmental considerations
- Potential revenues raised for the MTA
- Feasibility
- The degree to which the concept was based on congestion mitigation approaches that have been successfully implemented in other cities

Using this approach, the Traffic Congestion Mitigation Commission identified five options with different approaches to reducing congestion—congestion pricing, bridge tolling, pricing of parking and taxis, and license plate rationing—and evaluated those in more detail (Items 2, 3b, 3c, 3d, and 3e in **Table 2A-1**). Based on that evaluation, in January 2008, the Traffic Congestion Mitigation Commission issued a report that recommended a modified version of the PlaNYC concept, with the northern boundary of the tolling zone at 60th Street (Item 3f in **Table 2A-1**). The boundary was shifted so that trips from the Upper East Side and Upper West Side to Midtown and south of Midtown would be subject to the toll. In this modified plan, passenger vehicles and trucks entering the area of Manhattan south of 60th Street during the business day (weekdays 6:00 a.m. to 6:00 p.m.) would pay a daily fee. Roads on the periphery (the West Side Highway/Route 9A and the FDR Drive) were included in the zone. A credit would be provided to vehicles that paid inbound tolls at bridges or tunnels. The recommended concept also included a package of parking

and taxi policies to discourage driving within the zone, including placing a surcharge on FHV during certain hours, increasing parking meter rates, and eliminating resident parking tax exemptions. To address the possibility that drivers would park in the neighborhoods adjacent to the tolling zone and complete their trip with transit, the Traffic Congestion Mitigation Commission's plan included a recommendation that the City of New York be required to offer communities a residential parking permit program prior to the start of congestion pricing and to track park-and-ride activity as part of a comprehensive monitoring program. The Traffic Congestion Mitigation Commission concluded that the recommended plan would exceed the 6.3 percent VMT reduction required by the state legislation that established the commission, would raise an estimated \$491 million per year for transportation investment, and would have considerably lower operating and capital costs and a simpler fee structure than the original PlaNYC proposal. A tolling zone boundary at 60th Street (with the area south of 60th Street included in the zone) rather than 86th Street would also lead to many more intra-Manhattan trips being charged the toll. However, the recommendation was not enacted by the New York State Legislature and did not advance.³

In 2015, a citizens' group known as Move NY released a proposal, dubbed the Move NY Fair Plan, to reduce congestion in the Manhattan CBD and generate revenue for MTA (Item 4 in **Table 2A-1**). That plan involved adjusting tolls throughout New York City, including the following:

- Implementing new tolls on the four untolled East River bridges that connect to the Manhattan CBD (Brooklyn, Manhattan, Williamsburg, and Ed Koch Queensboro Bridges)
- Charging a toll for vehicles entering the Manhattan CBD by crossing at 60th Street
- Providing a credit to vehicles that enter the Manhattan CBD for tolls paid at the RFK Bridge within the previous hour
- Reducing tolls on TBTA's other bridges that do not lead to the Manhattan CBD

The plan also included a new surcharge on FHV in the Manhattan CBD instead of a CBD toll.⁴ While this proposal by a citizens' group had no official status and thus could not be approved or implemented without further action by others, its recommendations were considered by a panel formed by New York State Governor Andrew M. Cuomo in October 2017 (discussed below).

In October 2017, then-New York State Governor Andrew M. Cuomo created the Fix NYC Advisory Panel—consisting of community representatives, government officials, and business leaders from across the New York City region—to recommend actions to address the increasing traffic congestion in the Manhattan CBD and to identify sources of revenue to address deficiencies in the transit system. The panel examined various congestion pricing approaches for the Manhattan CBD, among other potential options, and considered programs implemented in other cities (Singapore, London, Stockholm, and Milan) (Item 5 in **Table 2A-1**). In

³ *Report to the Traffic Congestion Mitigation Commission and Recommended Implementation Plan*. January 31, 2008. https://www.dot.ny.gov/programs/congestion_mitigation_commission/final-recommendation.

⁴ <https://movenewyork.wordpress.com/watch-read-learn/>.

its January 2018 final report, the panel recommended short-term investments to improve connectivity between the Manhattan CBD and surrounding areas, including the following:

- Improving enforcement of traffic laws within the Manhattan CBD
- Addressing the distribution of government-issued parking permits, which are often used illegally and contribute to congestion
- Investigating the contribution of commuter, intercity, charter, and tour buses to congestion in Manhattan
- Reforming taxi regulations
- Implementing a surcharge on taxi and FHV trips in Manhattan south of 96th Street (This surcharge was implemented in February 2019.)

The report also recommended the long-term strategy of installing a tolling program for the Manhattan CBD, defined as the area “bounded by 60th Street on the north and Battery Park on the south, the Hudson River on the west and the East River on the east.” The recommended tolling program would exempt the FDR Drive from the Brooklyn Bridge to 60th Street from tolling and provide a credit to drivers using already tolled facilities to enter the pricing zone (the Lincoln, Holland, Hugh L. Carey, and Queens-Midtown Tunnels).⁵

Informed by the work of the Fix NYC Advisory Panel, the New York State Legislature created the Metropolitan Transportation Sustainability Advisory Workgroup as part of the fiscal year 2018 New York state budget. The workgroup—which was made up of government officials, transportation professionals, and representatives of business and commuter interest groups—examined actions that State of New York and local governments could take to address regional transportation needs, including reducing traffic congestion and suggesting new sources of funding for the region’s public transit system. The panel recommended that congestion pricing be adopted to reduce congestion and generate new revenue to modernize the MTA system, as documented in its December 2018 report.⁶ The panel’s recommendations informed the MTA Reform and Traffic Mobility Act (Traffic Mobility Act), which was enacted on April 1, 2019, as part of the fiscal year 2020 New York State budget.

⁵ Fix NYC Advisory Panel Report. January 2018.

⁶ Metropolitan Transportation Sustainability Advisory Workgroup Report. December 2018. <https://pfnyc.org/wp-content/uploads/2018/12/2018-12-Metropolitan-Transportation-Sustainability-Advisory-Workgroup-Report.pdf>.

Table 2A-1. Concepts Considered for Reducing Congestion in the Manhattan CBD

CONCEPT	PURPOSE	KEY CHARACTERISTICS	RESULT
1. 1973 Transportation Control Plan	To reduce congestion in the Manhattan CBD to meet requirements of the Clean Air Act	Tolls on the East River and Harlem River Bridges	Did not move forward.
2. 2007 PlaNYC Mayor's Plan	To reduce congestion in the Manhattan CBD and provide revenues for MTA capital and operating costs	Passenger vehicles and trucks entering, leaving, and operating within (i.e., intra-zonal) the area of Manhattan south of 86th Street during the business day (weekdays 6 a.m. to 6 p.m.) would pay a daily fee. Emergency vehicles, transit vehicles, taxis and FHV's, and vehicles with handicapped license plates would be exempt. Roads on the periphery (West Side Highway/Route 9A and FDR Drive) would not be included in the zone. Credit provided to vehicles that paid inbound toll at bridges or tunnels. Revenue to be directed to transportation system improvements. This concept was predicted to result in a 6.3% reduction in average VMT in the area south of 86th Street.	The 2008 Traffic Congestion and Mitigation Commission found that the mayor's plan had high capital and operating costs, required a large number of charging stations (each equipped with E-ZPass and license plate recognition monitors, and did not include a charge on taxi and livery trips into and out of the charging zone. Based on this evaluation, the commission recommended a different concept, the Recommended Modified Congestion Pricing Plan (Item 3f in this table) as the concept that best met the goals of the study.
3a. 2008 Traffic Congestion Mitigation Commission Study: Long List of Options	To reduce congestion in the Manhattan Business District with a minimum of at least 6.3% reduction in average VMT in the area south of 86th Street	A range of different approaches to reducing congestion, including telecommuting incentives; increasing the cost of parking in the Manhattan CBD; reducing the use of parking placards by public employees; additional taxi stands to reduce cruising; increasing cab fares and fees charged to cabs; raising tolls or implementation of variable tolls on existing facilities; East River bridge tolls; license plate rationing; mandatory carpooling; creation of High-Occupancy Toll lanes; congestion pricing with a 60th Street northern boundary; congestion pricing with an 86th Street northern boundary; congestion pricing with no intra-zonal charge and no free periphery; congestion pricing with variable charges or extended hours; congestion pricing with an exemption for hybrid vehicles; congestion pricing with a credit for other tolls paid; and various truck restrictions.	After evaluation, the 2008 Traffic Congestion and Mitigation Commission focused on five options for further consideration (Items 2, 3b, 3c, 3d, and 3e in this table). These five options best met the goals of the study, including reducing VMT by at least 6.3% and raising funds for transit investment. Many of the other approaches did not achieve the target VMT reduction or raised other issues of concern.

Table 2A-1. Concepts Considered for Reducing Congestion in the Manhattan CBD (continued)

CONCEPT	PURPOSE	KEY CHARACTERISTICS	RESULT
3b. 2008 Traffic Congestion Mitigation Commission Study: Alternative Congestion Pricing Plan	To reduce congestion in the Manhattan Business District with a minimum of at least 6.3% reduction in average VMT in the area south of 86th Street	Tolls on the East River and Harlem River Bridges; bus and bicycle lanes; reduction in and controls on on-street parking spaces; introduction of vehicle inspections related to emissions	The U.S. Environmental Protection Agency ruled that tolls on the bridges were not necessary given the investments the state and city were making in public transit at that time. The other components of the plan were implemented.
3c. 2008 Traffic Congestion Mitigation Commission Study: East River and Harlem River Toll Plan	To reduce congestion in the Manhattan Business District with a minimum of at least 6.3% reduction in average VMT in the area south of 86th Street	All untolled East River and Harlem River crossings would be subject to inbound and outbound tolls. These tolls would be in effect 24 hours a day, seven days a week and would match the existing toll rates East River crossings.	The 2008 Traffic Congestion and Mitigation Commission found that the concept did not distinguish between drivers who contributed to peak-period congestion and those who did not, failed to address trips starting and ending in Manhattan, would have adverse economic impacts on commercial vehicles and trips between the Bronx and Upper Manhattan, and given its greater impact on traffic between the Bronx and Upper Manhattan, would have a disproportionate impact on a small proportion of low- and moderate-income workers lacking transit alternatives.
3d. 2008 Traffic Congestion Mitigation Commission Study: License Plate Rationing Plan	To reduce congestion in the Manhattan Business District with a minimum of at least 6.3% reduction in average VMT in the area south of 86th Street	License plate rationing would restrict a set of vehicles from entering Manhattan south of 86th Street on certain days based on the last digit of the vehicle's license plate. New York City would ban each vehicle once every five days (i.e., restricting 20% of all vehicles each weekday from 6 a.m. to 6 p.m.).	The 2008 Traffic Congestion and Mitigation Commission found that the concept would not generate revenue, would reduce Port Authority of New York and New Jersey and MTA revenue, and would have to be coupled with a broad-based tax to fund transit improvements.

Table 2A-1. Concepts Considered for Reducing Congestion in the Manhattan CBD (continued)

CONCEPT	PURPOSE	KEY CHARACTERISTICS	RESULT
3e. 2008 Traffic Congestion Mitigation Commission Study: Combination Plan	To reduce congestion in the Manhattan Business District with a minimum of at least 6.3% reduction in average VMT in the area south of 86th Street	The concept provided a series of measures that would increase the cost of on-street and off-street parking in Manhattan south of 60th Street, and would raise the New York City parking tax for garages, eliminate the resident parking tax exemption within the zone, increase meter rates within the zone, and charge an overnight parking fee for all on-street spaces within the zone. The concept also called for reducing by 10,000 the number of government parking placards used to commute to jobs in the zone. To reduce taxi traffic, the concept applied a surcharge on all taxi trips within, into, or out of the area of Manhattan south of 86th Street.	The 2008 Traffic Congestion and Mitigation Commission found that the concept would reduce VMT by only 3.2%.
3f. 2008 Traffic Congestion Mitigation Commission Study: Recommended Modified Congestion Pricing Plan	To reduce congestion in the Manhattan Business District with a minimum of at least 6.3% reduction in average VMT in the area south of 86th Street	Passenger vehicles and trucks entering the area of Manhattan south of 60th Street during the business day (weekdays 6 a.m. to 6 p.m.) would pay a daily fee. A tolling zone boundary at 60th Street rather than 86th Street would lead to many more intra-Manhattan trips being charged the toll. Roads on the periphery (West Side Highway/Route 9A and FDR Drive) were included in the zone. Credit provided to vehicles that paid inbound toll at bridges or tunnels. Also included a package of parking and taxi policies to discourage driving within the zone, including a surcharge on FHV's during certain hours, increased parking meter rates, and elimination of resident parking tax exemption. Revenue to be directed to transportation system improvements.	The 2008 Traffic Congestion and Mitigation Commission recommended this concept that best met the goals of the study, including a 6.8% reduction in VMT. The commission found that this concept would generate \$520 million a year in revenue, was less expensive to build and operate than the PlaNYC concept, and did not raise significant regional equity concerns. The recommendation was not enacted by the New York State Legislature.
4. 2015 Move NY Fair Plan proposed by citizens' group known as Move NY	To reduce congestion in the Manhattan CBD and provide revenues for MTA capital and operating costs	This concept modified tolls throughout New York City, including new tolls at 60th Street for vehicles entering the Manhattan CBD, and added a new surcharge on FHV's operating in the Manhattan CBD. Generated revenue would be dedicated to transit and roadway improvements.	Fix NYC Advisory Panel incorporated components into that panel's recommendations (Item 5 in this table).

Table 2A-1. Concepts Considered for Reducing Congestion in the Manhattan CBD (continued)

CONCEPT	PURPOSE	KEY CHARACTERISTICS	RESULT
5. 2018 Fix NYC Advisory Panel Recommendation	To reduce traffic congestion in the Manhattan CBD and provide revenue for MTA capital and operating costs	Fix NYC Advisory Panel reviewed congestion pricing systems in place in London, Singapore, Stockholm, and Milan; evaluated a range of road pricing concepts, including priced managed lanes, conventional tolls, zone-based charging, truck tolling, and adjusted parking surcharges and vehicle registration fees. Fix NYC Advisory Panel recommended a phased congestion reduction plan, including increased enforcement of traffic laws, a surcharge on FHV's in the Manhattan CBD, and a zone pricing program for all vehicles entering the Manhattan CBD south of 60th Street. Daily toll for inbound vehicles entering Monday through Friday, 6 a.m. to 8 p.m. Buses and FHV's to be exempt from the zone charge. FDR Drive to be exempt. Potential implementation of variable pricing schedule.	An FHV surcharge was enacted in 2018. A number of the panel's other recommendations were incorporated into the 2019 MTA Reform and Traffic Mobility Act.
6. 2018 Metropolitan Transportation Sustainability Advisory Workgroup Recommendation	To address regional transportation needs, including excess traffic congestion, and to suggest new sources of sustainable funding for the region's public transit system	Recommended measures included implementing a new congestion pricing zone for the Manhattan CBD with generated revenue to be dedicated to MTA.	Congestion pricing recommendations were incorporated into the 2019 MTA Reform and Traffic Mobility Act.

2B, MTA Reform and Traffic Mobility Act

- New York State Vehicle and Traffic Law as amended, Title 8, Respective Powers of State and Local Authorities
 - Article 38, Regulation of Traffic by Public Authorities and Commissions, Section 1630(4)
 - Article 44-c, Central Business District Tolling Program (Sections 1701 – 1706)
- New York State Public Authorities Law as amended, Article 3, Bridge and Tunnel Authorities, Title 3, Triborough Bridge Authority
 - Section 553(9-s and 12-a) – Powers of the authority
 - Section 553-j – Additional powers and provisions in relation to central business district tolling program
 - Section 553-k – Traffic mobility review board
 - Section 566-a – Tax contract by the state
- New York State Public Officers Law, Article 6, Freedom of Information Law, Section 87(2)(p)
- New York State Tax Law as amended, Article 22, Personal Income Tax, Part 1, General, Section 606 – Credits Against Tax

New York State Vehicle and Traffic Law, as amended, Title 8, Respective Powers of State and Local Authorities

- Article 38, Regulation of Traffic by Public Authorities and Commissions, Section 1630(4)
- Article 44-c, Central Business District Tolling Program (Sections 1701 – 1706)

**New York State Vehicle and Traffic Law, as amended,
Title 8, Respective Powers of State and Local Authorities
Article 38, Regulation of Traffic by Public Authorities and Commissions
Section 1630(4)**

§ 1630. Regulation of traffic on highways under the jurisdiction of certain public authorities and commissions.

The New York state thruway authority, a county park commission, the Niagara Falls bridge commission, a parkway authority, a bridge authority, including the Buffalo and Fort Erie public bridge authority, the metropolitan transportation authority, the Long Island Rail Road, the Metro-North Commuter Railroad, the office of parks, recreation and historic preservation, the department of environmental conservation, the department of agriculture and markets, the industrial exhibit authority or a bridge and tunnel authority may by ordinance, order, rule or regulation prohibit, restrict or regulate traffic on or pedestrian use of any highway, property or facility under its jurisdiction. The provisions of section sixteen hundred of this title shall be applicable to such ordinances, orders, rules and regulations, provided, however, that such ordinances, orders, rules and regulations shall supersede the provisions of this chapter where inconsistent or in conflict with respect to the following enumerated subjects:

...

4. Charging of tolls, taxes, fees, licenses or permits for the use of the highway or any of its parts or entry into or remaining within the central business district established by article forty-four-C of this chapter, where the imposition thereof is authorized by law.

**New York State Vehicle and Traffic Law, as amended,
Title 8, Respective Powers of State and Local Authorities
Article 44-c, Central Business District Tolling Program (§§ 1701 – 1706)**

§ 1701. Legislative findings and declaration.

The ongoing failures of the tracks, signals, switches, electrical power, and other transportation infrastructure throughout the subway system in the city of New York continue to have a significant deleterious impact on the health, safety, and livelihood of commuters, tourists, resident New Yorkers, as well as business and commerce in the metropolitan commuter transportation district, which is the recognized economic engine of the state of New York, and thereby have adversely affected the economy of the state of New York. Temporary actions have been taken to address the safety of subway, bus and commuter rail riders in the short term including an emergency declaration and increased capital funding for the subways in the most recently adopted state budget. The legislature, however, determines that a long-term and sustainable solution is necessary in order to ensure stable and reliable funding to repair and revitalize this significantly important mass transit asset.

The legislature further finds and declares that traffic congestion in the city of New York ranks second worst among cities in the United States and third worst among cities in the world, and results in significant cost to the New York metropolitan area economy and in turn the state's economy at estimates exceeding one hundred billion dollars over the next five years. Travel speeds in the city of New York's central business district have dropped more than seventeen percent in two thousand sixteen to an average of 6.8 miles per hour and in Midtown Manhattan, the most congested area of the city-the area from fifty-ninth street to thirty-fifth street and from ninth avenue to the east river-the average vehicular speed is 4.7 miles per hour. Congestion in these areas is crippling and impacts the everyday lives of residents, commuters, taxi and for-hire vehicle traffic, bus transit and emergency services, and is a significant contributor to decreased air quality.

These issues have been recognized by both the Fix NYC Advisory Panel and the Metropolitan Transportation Sustainability Advisory Workgroup as significant impediments to everyday New Yorkers.

In order to ensure a safe and efficient mass transit system within the city of New York and to protect the public health and safety of New York's residents, a program to establish tolls for vehicles entering or remaining in the most congested area of the state is found to be necessary and to be a matter of substantial state concern.

§ 1702. Short title.

This act shall be known as and may be cited as "the traffic mobility act".

§ 1703. Definitions.

For the purposes of this article, unless the context otherwise requires:

1. "City" means the city of New York.
2. "Central business district toll" means a toll charged for entry into or remaining in the central business district as described in section seventeen hundred four of this article.
3. "Central business district tolling program" means the program for charging tolls for vehicles that enter or remain in the central business district and includes the central business district tolling infrastructure, the central business district tolling collection system and the central business district tolling customer service center.
4. "Central business district" means the area described in section seventeen hundred four of this article for which tolls shall be charged for a vehicle's entry into or remaining in such district.
5. "Central business district tolling infrastructure" means the devices and structures including but not limited to gantries, clear signage delineating entry into the central business district and toll amounts, and power and communication lines that the Triborough bridge and tunnel authority will plan, design, construct, and use as part of the central business district tolling program. Such infrastructure shall be planned, designed, installed and constructed pursuant to the memorandum of understanding executed pursuant to subdivision two-a of section seventeen hundred four of this article.
6. "Central business district tolling collection system" means the electronic system of collecting tolls or other charges using electronic data and/or images that the Triborough bridge and tunnel authority will plan, design, install and construct pursuant to the memorandum of understanding executed pursuant to subdivision two-a of section seventeen hundred four of this article, and that such authority shall operate as part of the central business district tolling program.
7. "Central business district tolling customer service center" means the customer contact and back-office system and operation services for the collection of central business district tolls and enforcement of central business district toll violations that the Triborough bridge and tunnel authority will plan, design, implement and operate as part of the central business district tolling program.
8. "Operation date" means the date determined by the Triborough bridge and tunnel authority, which shall not be earlier than December thirty-first, two thousand twenty, for the beginning of the operation and enforcement of the central business district tolling program. The operation and enforcement date shall commence only after an initial program testing period of thirty days where no collection of any tolls, fees, or other charges shall be authorized. As of the commencement date of operation and enforcement, there shall be a period of sixty days where only the established tolls may be collected without the collection of other fees or charges or fines.
9. "Triborough bridge and tunnel authority" means the corporation organized pursuant to section five hundred fifty-two of the public authorities law as consolidated pursuant to section five hundred fifty-two-a of the public authorities law or any successor corporation or corporation into which it may be consolidated.

§ 1704. Establishment of central business district tolling program.

1. The Triborough bridge and tunnel authority shall establish the central business district tolling program.
2. The central business district tolling program will operate in the central business district. The central business district shall include the geographic area in the borough of Manhattan south of and inclusive of sixtieth street to the extent practicable but shall not include the FDR Drive, and New York state route 9A otherwise known as the "West Side highway" including the Battery Park Underpass and any surface roadway portion of the Hugh L. Carey Tunnel connecting to West St. The boundaries of the central business district shall not be modified, expanded, or reduced and shall incorporate the outer bounds of the aforementioned district to the extent practicable.
 - 2-a. The Triborough bridge and tunnel authority shall enter into a memorandum of understanding with the city department of transportation for purposes of coordinating the planning, design, installation, construction and maintenance of the central business district tolling infrastructure including required signage. The Memorandum shall address the use of existing systems, devices and other facilities owned and operated by the city for the purposes of a central business district tolling program, as well as reimbursable costs associated with the planning, design, installation, construction and maintenance of such program. Such memorandum of understanding shall be entered into no later than sixty days from the effective date of this article.
3. (a) Notwithstanding any law to the contrary, the Triborough bridge and tunnel authority, pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the city department of transportation shall plan, design, install, construct, and maintain the central business district tolling infrastructure. The city of New York shall cooperate and consult with the Triborough bridge and tunnel authority to facilitate the planning, design, construction, timely implementation, and maintenance of the central business district tolling infrastructure and shall not unduly hinder or delay the planning, designing, installation, operation, construction, timely implementation, or maintenance of the same. Notwithstanding any provision of law to the contrary, the city of New York shall, pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the Triborough bridge and tunnel authority, be authorized to provide for the use of existing systems, devices and other facilities owned and operated by the city, including, but not limited to systems and devices installed pursuant to sections one thousand one hundred eleven-a, one thousand one hundred eleven-c, and one thousand one hundred eighty-b of this chapter to facilitate the Triborough bridge and tunnel authority's central business district tolling program and shall work with the Triborough bridge and tunnel authority to facilitate the same.
 - (b) The Triborough bridge and tunnel authority shall, pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the city department of transportation, plan, design, install, construct, and maintain a central business district toll collection system and implement and operate the same to collect the central business district toll.

(c) The Triborough bridge and tunnel authority shall plan, design, implement and operate a central business district toll customer service center.

(d) The central business district tolling program shall be planned, designed, implemented and operated to facilitate payment of central business district tolls by credit or debit card, check or automated clearing house payment, by telephone or over the internet or any other method of payment that the Triborough bridge and tunnel authority may implement.

(e) All procurements of goods, services or construction of any kind by the Triborough bridge and tunnel authority for the central business district tolling program shall be deemed to be subject only to the same requirements that otherwise apply to procurements by the Triborough bridge and tunnel authority.

(f) Signage shall be clearly delineated to provide notice at a reasonable distance prior to, and upon entry into, the central business district and upon exit from the central business district. Signage prior to entry must include the toll rates to be charged. Additionally, signage shall be provided, where practicable, to provide drivers adequate notice to avoid entry into the central business district. Design, placement and installation of signage by the Triborough bridge and tunnel authority shall be performed pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the city department of transportation.

4. The central business district tolling infrastructure, the central business district toll collection system and the central business district tolling customer service center shall be completed by the operation date.

5. Responsibility for maintenance of the central business district tolling infrastructure after the operation date shall be performed by the Triborough bridge and tunnel authority pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section with the city department of transportation.

6. The planning, designing, constructing, installing or maintaining of the central business district tolling program and the planning, designing, installing, constructing, operating or maintaining of the central business district toll collection system by the Triborough bridge and tunnel authority including the establishment by such authority of central business district tolls, and any other fees or rentals for the use of its projects and any changes thereafter shall not be subject to the provisions of article eight of the environmental conservation law, the provisions of chapter six of article forty-three or chapter five of title sixty-two of the rules of the city of New York, or the provisions of section one hundred ninety-seven-c of the New York city charter, relating to a uniform land use review procedure, nor the provisions of any other local law of the city of New York of like or similar effect including approvals or charges associated with the use of property owned and maintained by the city of New York necessary for the installation of central business district tolling infrastructure nor shall the determination of the central business district toll amounts by the Triborough bridge and tunnel authority board be subject to any such provisions of law. The planning, designing, installing, constructing or maintaining of the central business district tolling program by the Triborough bridge and tunnel authority shall be performed pursuant to the memorandum of understanding executed pursuant to subdivision two-a of this section.

§ 1704-a. Central business district toll.

1. Consistent with the goals of reducing traffic congestion within the central business district and funding capital projects the Triborough bridge and tunnel authority shall have the power, subject to agreements with its bondholders, and applicable Federal law to establish and charge variable tolls and fees for vehicles entering or remaining in the central business district at any time and shall have the power, subject to agreements with bondholders, and applicable Federal law to make rules and regulations for the establishment and collection of central business district tolls, fees, and other charges. For purposes of establishing a central business district toll or tolls the board shall, at minimum, ensure annual revenues and fees collected under such program, less costs of operation of the same, provide for sufficient revenues into the central business district tolling capital lockbox fund, established pursuant to section five hundred fifty-three-j of the public authorities law necessary to fund fifteen billion dollars for capital projects for the 2020 to 2024 MTA capital program, and any additional revenues above that amount to be available for any successor programs. Additionally, no toll may be established and charged on passenger vehicles registered pursuant to subdivision six of section four hundred one of this chapter more than once per day for purposes of entering the central business district.

2. No qualifying authorized emergency vehicle as defined pursuant to section one hundred one of this chapter or a qualifying vehicle transporting a person with disabilities shall be charged a central business district toll if it enters or remains in the central business district. Application for such toll exemption shall be made in such manner as prescribed by the Triborough bridge and tunnel authority and shall contain such information as the authority may reasonably require.

3. (a) The Triborough bridge and tunnel authority shall implement a plan for credits, discounts and/or exemptions for tolls paid on bridges and crossings informed by the recommendations of the traffic mobility review board.

(b) The Triborough bridge and tunnel authority shall be authorized to provide additional credits, discounts and exemptions informed by the recommendations of the traffic mobility review board and a traffic study that considers impact.

4. The Triborough bridge and tunnel authority shall implement a plan to address credits, discounts, and/or exemptions for for-hire vehicles as defined by, and subject to a surcharge imposed by, article twenty-nine-C of the tax law for a for-hire transportation trip, informed by the recommendation of the traffic mobility review board.

§ 1705. Disposition of revenue and penalties.

The Triborough bridge and tunnel authority shall establish and collect central business district tolls, fees and other charges as provided in subdivision twelve-a of section five hundred fifty-three of the public authorities law.

§ 1706. Reporting.

Beginning one year after the operation date and every two years thereafter, the Triborough bridge and tunnel authority, in consultation with the city department of transportation shall report on the effect of the central business district tolling program on traffic congestion in and around the central business district and on mass transit use and taxi and for-hire vehicle use including the vehicle-miles traveled for each trip within the central business district for taxis and for-hire vehicles; the current and historic volume and type of vehicles including, but not limited to, commercial trucks, transportation network companies, taxis, private cars, and tour buses, entering the central business district; environmental improvements, including but not limited to, air quality, and emissions trends in and around the central business district; congestion reduction measures; and transit ridership and average bus speeds within the central business district, and on all receipts and expenditures relating to the central business district tolling program. The department of transportation of the city of New York shall be required to assist in gathering and providing to the Triborough bridge and tunnel authority traffic impact data and other related data as directed by the Triborough bridge and tunnel authority for purposes of compiling such report. The report shall be readily available to the public, and shall be posted on the authority's website and be submitted to the governor, the director of the budget, the temporary president of the senate, the speaker of the assembly, the mayor and council speaker of the city of New York, the metropolitan transportation authority board and the metropolitan transportation authority capital program review board.

**New York State Public Authorities Law, as amended,
Article 3, Bridge and Tunnel Authorities,
Title 3, Triborough Bridge Authority**

- Section 553(9-s and 12-a) – Powers of the authority
- Section 553-j – Additional powers and provisions in relation to central business district tolling program
- Section 553-k – Traffic mobility review board
- Section 566-a – Tax contract by the state

New York State Public Authorities Law, as amended
Article 3: Bridge and Tunnel Authorities
Title 3: Triborough Bridge Authority

§ 553. Powers of the authority.

The authority shall have the power

...

9-s. To acquire, design, construct, maintain, operate, improve and reconstruct, so long as its corporate existence shall continue, the following projects,

...

(s) The central business district tolling program to the extent specified in article forty-four-C of the vehicle and traffic law and in this title.

12-a. To establish and charge variable tolls, fees and other charges for vehicles entering or remaining within the central business district and to make rules and regulations for the collection of such tolls, fees and other charges, subject to and in accordance with such agreement with bondholders and applicable federal law as may be made as hereinafter provided. Subject to agreements with bondholders and applicable federal law, all tolls, fees and other revenues derived from the central business district tolling program shall be applied to the payment of operating, administration, and other necessary expenses of the authority properly allocable to such program, including the capital costs of such program, and to the payment of interest or principal of bonds, notes or other obligations of the authority or the metropolitan transportation authority issued for transit and commuter projects as provided in section five hundred fifty-three-j of this title, and shall not be subject to distribution under section five hundred sixty-nine-c of this title or section twelve hundred nineteen-a of this chapter. The provisions of section twenty-eight hundred four of this chapter shall not be applicable to the tolls and fees established by the authority pursuant to this subdivision. Any such fares, tolls, and other charges shall be established and changed only if approved by resolution of the authority adopted by not less than a majority vote of the whole number of members of the authority then in office, with the chairman having one additional vote in the event of a tie vote, and only after a public hearing.

New York State Public Authorities Law, as amended
Article 3: Bridge and Tunnel Authorities
Title 3: Triborough Bridge Authority

§ 553-j. Additional powers and provisions in relation to central business district tolling program

1. The authority shall establish a fund to be known as the central business district tolling capital lockbox fund which shall be kept separate from and shall not be commingled with any other monies of the authority. The fund shall consist of all monies received by the authority pursuant to article forty-four-C of the vehicle and traffic law, subdivision twelve-a of section five hundred fifty-three of this title, and revenues of the real estate transfer tax deposited pursuant to subdivision (b) of section fourteen hundred twenty-one of the tax law, and sales tax pursuant to subdivision (c) of section eleven hundred forty-eight of the tax law, subparagraph (B) of paragraph five of subdivision (c) of section twelve hundred sixty-one of the tax law, and funds appropriated from the central business district trust fund established pursuant to section ninety-nine-ff of the state finance law.

* 2. Monies in the fund shall be applied, subject to agreements with bondholders and applicable federal law, to the payment of operating, administration, and other necessary expenses of the authority, or to the city of New York subject to the memorandum of understanding executed pursuant to subdivision two-a of section seventeen hundred four of the vehicle and traffic law properly allocable to such program, including the planning, designing, constructing, installing or maintaining of the central business district tolling program, including, without limitation, the central business district tolling infrastructure, the central business district tolling collection system and the central business district tolling customer service center, and the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs. Monies in the fund may be: (a) pledged by the authority to secure and be applied to the payment of the bonds, notes or other obligations of the authority to finance the costs of the central business district tolling program, including, without limitation, the central business district tolling infrastructure, the central business district tolling collection system and the central business district tolling customer service center, and the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs, including debt service, reserve requirements, if any, the payment of amounts required under bond and note facilities or agreements related thereto, the payment of federal government loans, security or credit arrangements or other agreements related thereto; or (b) used by the authority for the payment of such capital costs of the central business district tolling program and the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs; or (c) transferred to the metropolitan transportation authority and (1) pledged by the metropolitan transportation authority to secure and be applied to the payment of the bonds, notes or other obligations of the metropolitan transportation authority to finance the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs, including debt service, reserve requirements, if any, the payment of amounts required under bond and note facilities or agreements related thereto, the payment of federal government loans,

security or credit arrangements or other agreements related thereto, or (2) used by the metropolitan transportation authority for the payment of the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs, or (3) subject to approval by the board of the metropolitan transportation authority and the director of the budget, used by the metropolitan transportation authority in all or any of the fiscal years of the authority beginning in 2020 through 2021 to offset decreases in revenue, including but not limited to, lost taxes, fees, charges, fares and tolls, due in whole or in part, or increases in operating costs due in whole to the state disaster emergency caused by the novel coronavirus, COVID-19. Such revenues shall only supplement and shall not supplant any federal, state, or local funds expended by the authority or the metropolitan transportation authority, or such authority's or metropolitan transportation authority's affiliates or subsidiaries for such respective purposes. Central business district toll revenues may be used as required to obtain, utilize, or maintain federal authorization to collect tolls on federal aid highways. Provided further that, in the event the authority or metropolitan transportation authority receives funds or reimbursements, including without limitation from the federal government or insurance maintained by the authority or metropolitan transportation authority, due in whole or in part to the novel coronavirus, COVID-19, any monies from the fund used to offset decreases in revenue or increases in operating costs due in whole or in part to the state disaster emergency caused by the novel coronavirus, COVID-19, shall be repaid after the authority or the metropolitan transportation authority fully repays any public or private borrowings, draws on any lines of credit, issuances of revenue anticipation notes, any internal loans, and use of corpus of OPEB Trust to pay current retiree healthcare cost necessitated by COVID-19 revenue shortfall. Such obligation to repay shall be limited to the availability of any excess monies, and any such funds or reimbursements in excess of the amounts needed to fully repay such amounts shall be transferred to the fund and used for the purposes originally intended for such fund.

* NB Effective until April 3, 2022

* 2. Monies in the fund shall be applied, subject to agreements with bondholders and applicable federal law, to the payment of operating, administration, and other necessary expenses of the authority, or to the city of New York subject to the memorandum of understanding executed pursuant to subdivision two-a of section seventeen hundred four of the vehicle and traffic law properly allocable to such program, including the planning, designing, constructing, installing or maintaining of the central business district tolling program, including, without limitation, the central business district tolling infrastructure, the central business district tolling collection system and the central business district tolling customer service center, and the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs. Monies in the fund may be: (a) pledged by the authority to secure and be applied to the payment of the bonds, notes or other obligations of the authority to finance the costs of the central business district tolling program, including, without limitation, the central business district tolling infrastructure, the central business district tolling collection system and the central business district tolling customer service center, and the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs, including debt service, reserve requirements, if any, the payment of amounts required under bond and note facilities or agreements related thereto, the payment of federal government loans, security or credit

arrangements or other agreements related thereto; or (b) used by the authority for the payment of such capital costs of the central business district tolling program and the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs; or (c) transferred to the metropolitan transportation authority and (1) pledged by the metropolitan transportation authority to secure and be applied to the payment of the bonds, notes or other obligations of the metropolitan transportation authority to finance the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs, including debt service, reserve requirements, if any, the payment of amounts required under bond and note facilities or agreements related thereto, the payment of federal government loans, security or credit arrangements or other agreements related thereto, or (2) used by the metropolitan transportation authority for the payment of the costs of any metropolitan transportation authority capital projects included within the 2020 to 2024 MTA capital program or any successor programs. Such revenues shall only supplement and shall not supplant any federal, state, or local funds expended by the authority or the metropolitan transportation authority, or such authority's or metropolitan transportation authority's affiliates or subsidiaries for such respective purposes. Central business district toll revenues may be used as required to obtain, utilize, or maintain federal authorization to collect tolls on federal aid highways.

* NB Effective April 3, 2022

3. Any monies deposited in the fund shall be held in the fund free and clear of any claim by any person arising out of or in connection with article forty-four-C of the vehicle and traffic law and subdivision twelve-a of section five hundred fifty-three of this title. Without limiting the generality of the foregoing, no person paying any amount that is deposited into the fund shall have any right or claim against the authority or the metropolitan transportation authority, any of their bondholders, any of the authority's or the metropolitan transportation authority's subsidiaries or affiliates to any monies in or distributed from the fund or in respect of a refund, rebate, credit or reimbursement of monies arising out of or in connection with article forty-four-C of the vehicle and traffic law and subdivision twelve-a of section five hundred fifty-three of this title.

3-a. Of the capital project costs paid by this fund: eighty percent shall be capital project costs of the New York city transit authority and its subsidiary, Staten Island Rapid Transit Operating Authority, and MTA Bus with priority given to the subway system, new signaling, new subway cars, track and car repair, accessibility, buses and bus system improvements and further investments in expanding transit availability to areas in the outer boroughs that have limited mass transit options; ten percent shall be capital project costs of the Long Island Rail Road, including but not limited to, parking facilities, rolling stock, capacity enhancements, accessibility, and expanding transit availability to areas in the Metropolitan Commuter Transportation District that have limited mass transit options; and ten percent shall be capital project costs of the Metro-North Commuter Railroad Company, including but not limited to, parking facilities, rolling stock, capacity enhancements, accessibility, and expanding transit availability to areas in the Metropolitan Commuter Transportation District that have limited mass transit options.

* 4. The authority shall report annually on all receipts and expenditures of the fund. The report shall detail operating expenses of the central business district tolling program and all fund expenditures including capital projects. If, during the period of the report, any monies in the fund were used by the authority or the metropolitan transportation authority to offset decreases in revenue lost in whole or in part due to the state disaster emergency caused by novel coronavirus, COVID-19, or increases in operating costs in whole due to the novel coronavirus, COVID-19, the report shall also provide: (a) details of such decreases in revenue in whole, (b) details of such decreases in revenue in part, (c) details of such increases in costs, (d) the methodology used by the authority or metropolitan transportation authority to calculate such changes, and (e) explanation for attributing a particular increase in cost or a particular decrease in revenue, to the state disaster emergency caused by coronavirus, COVID-19. The report shall be readily available to the public, and shall be posted on the authority's website and be submitted to the governor, the temporary president of the senate, the speaker of the assembly, the comptroller, the director of the budget, the mayor and council of the city of New York, the metropolitan transportation authority board, and the metropolitan transportation authority capital program review board.

* NB Effective until April 3, 2022

* 4. The authority shall report annually on all receipts and expenditures of the fund. The report shall detail operating expenses of the central business district tolling program and all fund expenditures including capital projects. The report shall be readily available to the public, and shall be posted on the authority's website and be submitted to the governor, the temporary president of the senate, the speaker of the assembly, the mayor and council of the city of New York, the metropolitan transportation authority board, and the metropolitan transportation authority capital program review board.

* NB Effective April 3, 2022

5. Any operating funding used for the purposes of a central business district tolling program from this fund shall be approved, annually, in a plan of expenditures, by the director of the budget.

New York State Public Authorities Law, as amended

Article 3: Bridge and Tunnel Authorities

Title 3: Triborough Bridge Authority

§ 553-k. Traffic mobility review board

1. The authority's board shall establish the "traffic mobility review" board (board), which shall consist of a chair and five members, that shall be made up of regional representation, one of whom shall be recommended by the mayor of the city of New York, one of whom shall reside in the Metro North Region, and one of whom shall reside in the Long Island Rail Road Region. Members of the board must have experience in at least one of the following areas: public finance; transportation; mass transit; or management. The chair and the members of the board shall be appointed by the authority.

2. The board shall make a recommendation regarding the central business district toll amounts to be established pursuant to article forty-four-C of the vehicle and traffic law, which shall include a variable-pricing structure, no sooner than November fifteenth, two thousand twenty and no later than December thirty-first, two thousand twenty, or no later than thirty days before a central business district tolling program is initiated, whichever is later. Such recommendation shall be submitted to the board of the Triborough bridge and tunnel authority for consideration before the Triborough bridge and tunnel authority board may approve central business district toll amounts that may be established and adopted.

3. For purposes of recommending a central business district toll or tolls in addition to the goal of reducing traffic within the central business district, the board shall, at minimum, ensure that annual revenues and fees collected under such program, less costs of such program, provide for revenues into the central business district tolling capital lockbox fund, established pursuant to section five hundred fifty-three-j of this chapter, necessary to fund fifteen billion dollars for capital projects for the 2020 to 2024 capital program, and any additional revenues above that amount to be available for any successor program. The board shall consider for purposes of its recommendations, factors including but not limited to, traffic patterns, traffic mitigation measures, operating costs, public impact, public safety, hardships, vehicle type, discounts for motorcycles, peak and off-peak rates and environmental impacts, including but not limited to air quality and emissions trends. The board shall recommend a plan for credits, discounts, and/or exemptions for tolls paid on bridges and crossings which shall be informed by a traffic study associated with the impact of any such credits, discounts and/or exemptions on the recommended toll. The board shall recommend a plan for credits, discounts, and/or exemptions for for-hire vehicles defined, and subject to a surcharge imposed by, article twenty-nine-C of the tax law for a for-hire transportation trip based on factors including, but not limited to, initial market entry costs associated with licensing and regulation, comparative contribution to congestion in the central business district, and general industry impact. The board shall produce a detailed report that provides information regarding the board's review and analysis for purposes of establishing its recommendations, including but not limited to, all of the considerations referred to in this subdivision. The board shall not recommend a toll that provides for charging passenger vehicles registered pursuant to subdivision six of section four hundred one of the vehicle and traffic law more than once per day.

Appendix 2B, Project Alternatives: MTA Reform and Traffic Mobility Act

4. The authority, its subsidiaries, affiliates, and subsidiaries of affiliates, the city of New York, and any state agency or authority shall provide any assistance necessary to assist in the completion of the board's work and promptly respond to any requests for information or consultation consistent with the purposes of this section.

5. The Metropolitan Transportation Authority capital plan shall be reviewed by the traffic mobility review board.

6. Members of the board shall serve without compensation.

New York State Public Authorities Law, as amended
Article 3: Bridge and Tunnel Authorities
Title 3: Triborough Bridge Authority

§ 566-a. Tax contract by the state

1. It is hereby found, determined and declared that the authority and the carrying out of its corporate purposes is in all respects for the benefit of the people of the state of New York, for the improvement of their health, welfare and prosperity, and, in the case of some of the said purposes, for the promotion of their traffic, and that said purposes are public purposes and, in the case of those purposes which consist of vehicular bridges, vehicular tunnels and approaches thereto and the central business district tolling program, the project is an essential part of the public highway system and the authority will be performing an essential governmental function in the exercise of the powers conferred by this title, and the state of New York covenants with the purchasers and with all subsequent holders and transferees of bonds issued after January first, nineteen hundred thirty-nine by the authority pursuant to this title, in consideration of the acceptance of any payment for the bonds that the bonds of the authority issued after January first, nineteen hundred thirty-nine pursuant to this title and the income therefrom, and all moneys, funds, tolls and other revenues pledged to pay or secure the payment of such bonds, shall at all times be free from taxation except for estate taxes and taxes on transfers by or in contemplation of death.

2. Nothing herein shall be construed to repeal or supersede any tax exemptions heretofore or hereafter granted by general or other laws.

New York State Public Officers Law, as amended
Article 6, Freedom of Information Law

- Section 87(2)(p) – Access to agency records

New York State Public Officers Law, as amended
Article 6, Freedom of Information Law
Section 87(2)(p)

§ 87. Access to agency records.

2. Each agency shall, in accordance with its published rules, make available for public inspection and copying all records, except those records or portions thereof that may be withheld pursuant to the exceptions of rights of access appearing in this subdivision. A denial of access shall not be based solely on the category or type of such record and shall be valid only when there is a particularized and specific justification for such denial. Each agency shall, in accordance with its published rules, make available for public inspection and copying all records, except that such agency may deny access to records or portions thereof that:

...

* (p) are data or images produced by an electronic toll collection system under authority of article forty-four-C of the vehicle and traffic law and in title three of article three of the public authorities law.

* NB There are 2 par (p)'s

New York State Tax Law, as amended
Article 2, Personal Income Tax
Part 1, General

- Section 606 -Credits Against Tax

New York State Tax Law, as amended
Article 22, Personal Income Tax
Part 1, General

§ 606. Credits Against Tax.

* (jjj) Central business district toll credit.

(1) For taxable years beginning on or after January first, two thousand twenty-one, a resident individual whose primary residence is located in the central business district established pursuant to article forty-four-C of the vehicle and traffic law and whose New York adjusted gross income for the taxable year is less than sixty thousand dollars shall be entitled to a credit as calculated pursuant to paragraph two of this subsection.

(2) The credit shall be equal to the aggregate amount of central business district tolls paid by the taxpayer during the taxable year pursuant to the central business district tolling program authorized by article forty-four-C of the vehicle and traffic law. Provided, however, that any toll that would constitute a trade or business expense under section 162 of the internal revenue code shall be excluded.

(3) If the amount of the credit allowed under this subsection for any taxable year shall exceed the taxpayer's tax for such year, the excess shall be treated as an overpayment of tax to be credited or refunded in accordance with the provisions of section six hundred eighty-six of this article, provided, however, that no interest shall be paid thereon.

* NB There are 3 subsection (jjj)'s

2C, Memorandum of Understanding between TBTA and NYCDOT

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

2 Broadway
New York, NY 10004

-and-

THE CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION

55 Water Street
New York, NY 10041

Memorandum of Understanding ("Agreement")

This Agreement, made and effective on the 11th day of June 2019 (the "Effective Date"), is entered into between the City of New York (the "City"), a municipal corporation acting on behalf of its Department of Transportation with offices at 55 Water Street, New York, NY 10041 ("NYCDOT"), and the Triborough Bridge and Tunnel Authority, a public benefit corporation of the State of New York with offices at 2 Broadway, New York, NY 10004 ("TBTA").

WHEREAS, pursuant to the MTA reform and traffic mobility act (the "Act") TBTA is establishing a "central business district tolling program" (the "Program"), as defined in Article 44-C of the New York State Vehicle and Traffic Law ("VTL")

WHEREAS, TBTA will operate the Program in the "central business district" (the "CBD"), as defined in VTL §1703(4), commencing on the "operation date" ("Operation Date"), as defined in VTL § 1703(8).

WHEREAS, pursuant to VTL §1704(2-a), TBTA and NYCDOT enter into this Agreement for purposes of coordinating and facilitating the planning, design, installation, construction, and maintenance of the central business district tolling infrastructure as defined by VTL §1703, including required signage ("infrastructure").

WHEREAS, pursuant to VTL §1704(3), TBTA and NYCDOT enter into this Agreement for purposes of coordinating and facilitating the planning, design, installation, construction, and maintenance of the equipment and devices which are located in the Impacted Public Right of Way (as defined herein) to collect electronic data and/or images as part of the central business district toll collection system as defined by VTL §1703 ("toll collection system equipment").

WHEREAS, TBTA, in consultation with NYCDOT, shall plan, design, implement, and maintain the infrastructure and toll collection system equipment in such a way as to protect public safety.

WHEREAS, this Agreement also addresses TBTA's right to use existing systems, devices and other facilities owned and operated by NYCDOT for the purposes of the Program, as well as actual reimbursable costs to the City of New York, including NYCDOT and other agencies, associated with the planning, design, installation, construction, operation and maintenance of the Program, in accordance with VTL §1704(2-a), properly allocable to the Program;

WHEREAS, TBTA requires access to a portion of the street and sidewalk, as well as any other poles, lines or appurtenances (the "Impacted Public Right of Way") in order to install, maintain, and repair the infrastructure; and

WHEREAS, TBTA requires access to the Impacted Public Right of Way in order to install, maintain, and repair the toll collection system equipment; and

WHEREAS, by this Agreement, NYCDOT has agreed to allow TBTA to use the Impacted Public Right of Way, subject to the following terms and conditions.

IT IS HEREBY AGREED:

1. Access Granted. (a) NYCDOT hereby grants to TBTA and its designees (e.g. contractors, subcontractors and suppliers) a license to use and maintain the Impacted Public Right of Way and within the same to install, inspect, maintain, repair or remove the infrastructure in strict accordance with Exhibit A attached hereto and Section 6, Permitting, herein. (b) NYCDOT hereby grants to TBTA and its designees (e.g. contractors, subcontractors and suppliers) a license to use and maintain the Impacted Public Right of Way and within the same to install, inspect, maintain, repair or remove the toll collection system equipment in strict accordance with Section 6, Permitting, herein.
2. TBTA's Right To Operate the Infrastructure and Toll Collection System Equipment. NYCDOT agrees that TBTA has the right to operate the infrastructure and toll collection system equipment in the Impacted Public Right of Way.
3. Term. This Agreement is for a ten (10) year term, commencing on the Effective Date, and it will automatically renew for successive ten (10) year terms, unless terminated earlier in accordance with this Agreement, provided however that it shall not be terminated in whole or in part in any way that would prevent TBTA's collection of Program tolls so long as there are any outstanding bonds, notes or other obligations that have been secured by funds in the Central Business District Tolling Capital Lockbox Fund established pursuant to Public Authorities Law §553-j.
4. Reimbursement to NYCDOT and other City Agencies. TBTA shall reimburse NYCDOT and other City entities ("City Agencies") for actual costs of work performed and services provided by NYCDOT and other City Agencies, their consultants and contractors: (i) associated with the planning, design, installation, construction and maintenance of the infrastructure, including signage, and the toll collection system equipment that is subject to this Agreement, in accordance with VTL §1704(2-a); (ii) associated with the Traffic Study (described in Section 9, Traffic Study, herein), Evaluation Report (described in Section 10, Evaluation Report, herein) and Parking Study (described in §9 of the Act); and (iii) otherwise requested by TBTA and agreed to by NYCDOT, properly allocable to the Program as determined by TBTA.

NYCDOT shall keep and cause their consultants and contractors to keep, for a minimum of six (6) years, all appropriate cost records and accounts relating to the NYCDOT's reimbursable costs under this Agreement. NYCDOT will notify and request that other City Agencies require the same of their consultants and contractors.

NYCDOT shall submit quarterly reimbursement requests and projected costs for the next quarter to TBTA for costs pertaining to the Program. Upon approval of each reimbursement request pursuant to New York State Public Authorities Law § 553-j(2), TBTA shall make such payment to NYCDOT within three (3) months of receipt of each quarterly reimbursement request. NYCDOT shall submit such reimbursement requests within six (6) months of the cost being incurred.

5. TBTA Special Obligation.

- a. TBTA is authorized to undertake this Program by virtue of the provisions of Article 44-C of the VTL, Central Business District Tolling Program.
- b. For reimbursable costs payable to NYCDOT before the Program has begun collecting tolls, this Agreement constitutes a special obligation of TBTA, payable solely from the \$100 million appropriated by the Legislature as an advance to the Metropolitan Transportation Authority ("MTA") for the capital project costs of the planning, design, acquisition and construction, required or expected to be required to implement the Program or from other financing mechanisms to be determined which will also be fully reimbursed from net revenues generated from the Program. TBTA represents that these monies will be adequate to fund the NYCDOT reimbursable costs under the Agreement. NYCDOT reimbursable costs under this Agreement are not payable from any other monies of TBTA, including, without limitation, monies received by TBTA from the operation of the other projects and facilities set forth in subdivision 9 of Section 553 of the New York State Public Authorities Law, other than the Central Business District Tolling Program, except as otherwise provided above.
- c. For reimbursable costs payable to NYCDOT after the Program has begun collecting tolls, the Agreement constitutes a special obligation of TBTA, payable solely from monies deposited into the central business district tolling capital lockbox fund and available for use by TBTA thereunder ("Central Business District Tolling Program Receipts"), which fund has been established in accordance with Section 553-j of the New York State Public Authorities Law (the "CBD Lockbox Fund"), subject to agreements with bondholders secured by the Central Business District Tolling Program Receipts. NYCDOT reimbursable costs under this Agreement are not payable from any other monies of TBTA, including, without limitation, monies received by TBTA from the operation of the other projects and facilities set forth in subdivision 9 of Section 553 of the New York State Public Authorities Law, other than the Central Business District Tolling Program. TBTA represents that the estimated Central Business District Tolling Program Receipts to be deposited in the CBD Lockbox Fund will be adequate to fund the NYCDOT reimbursable costs under this Agreement.

6. Permitting.

- a. TBTA voluntarily agrees to direct its contractors to obtain permits to occupy, open or close City roadways and sidewalks from the NYCDOT

Office of Construction Mitigation and Coordination (“OCMC”) for the installation, maintenance, repair or removal of the infrastructure and toll collection system equipment (“Contractor OCMC Permits”).

- b. In accordance with NYCDOT’s obligation to not unduly hinder or delay the planning, designing, installation, operation, construction, timely implementation, or maintenance of the infrastructure, NYCDOT agrees that OCMC shall implement an expedited process for the issuance of Contractor OCMC Permits. OCMC shall dedicate the necessary staff to process Contractor OCMC Permits in an expedited and prioritized manner and shall issue Contractor OCMC Permits within two (2) business days of application from TBTA contractors, except for an event deemed to be a force majeure. NYCDOT will also provide a process for TBTA’s contractor to receive an immediate Contractor OCMC Permit for required work in the event of an emergency that imperils life, health, safety or operation of the infrastructure or toll collection system equipment.
- c. Notwithstanding anything to the contrary herein, TBTA expressly reserves its right to assert in the Dispute Resolution process herein that it is not legally obligated to obtain Contractor OCMC Permits and pending a final determination rendered as a result of the Dispute Resolution process, to immediately direct its contractor to stop obtaining Contractor OCMC Permits for the installation, maintenance, repair or removal of the infrastructure or toll collection system equipment.
- d. All disputes regarding Contractor OCMC Permits shall be resolved solely in accordance with Section 24, Dispute Resolution, in lieu of any OCMC appeals process.

7. NYCDOT Responsibilities and TBTA Responsibilities. In support of the Program, NYCDOT shall cooperate and consult with TBTA to facilitate the planning, design, construction, timely implementation, and maintenance of the infrastructure and toll collection system equipment, and shall not unduly hinder or delay the planning, designing, installation, operation, construction, timely implementation, or maintenance of the same. NYCDOT shall provide assistance for the planning, design, construction, timely implementation, and maintenance of the infrastructure and toll collection system equipment including, but not limited to the following:

- a. NYCDOT shall provide to TBTA detailed information on all NYCDOT planned projects that may impact the collection of Program tolls including but not limited to street improvement projects, capital street reconstruction projects, and capital bridge maintenance and repair projects in the vicinity of the 60th Street cordon, on FDR Drive south of 61st Street, on Route 9A south of 61st Street, on the Battery Park Underpass, and on the four East River Bridges or connecting ramps. NYCDOT will seek to schedule and implement such projects so as to minimize interference with the Program.
- b. NYCDOT shall facilitate TBTA engagement with other City Agencies, including but not limited to the New York City Department of Parks and Recreation, the New York City Department of Design and Construction, the

New York City Department of Environmental Protection, the New York City Police Department, and the New York City Fire Department regarding the Program. This engagement shall include the identification and coordination of other City Agency construction and maintenance projects in the vicinity of the 60th Street cordon, the FDR Drive south of 61st Street, on Route 9A south of 61st Street, the Battery Park Underpass and on the four East River Bridges or connecting ramps.

- c. NYCDOT shall review in a timely manner all TBTA requests for street design changes in support of the Program, including but not limited to changes in street direction, street geometry, curb regulations, or turn restrictions. If NYCDOT finds such changes feasible, NYCDOT will implement such changes or allow the TBTA or its contractor to implement such changes.
- d. NYCDOT shall provide to TBTA traffic impact data and other related data, as requested by TBTA, for the Evaluation Report and other uses relevant to the Program.
- e. NYCDOT shall promptly furnish TBTA any necessary available records, engineering reports, inspection reports and other technical information that may be required for the planning, design, installation, construction and maintenance of the infrastructure and toll collection system equipment.
- f. Upon request by TBTA for specific locations, NYCDOT will provide to TBTA existing engineering drawings for bridges, streets, and other NYCDOT structures, as well as other street furniture drawings that NYCDOT may have. The drawings may be subject to non-disclosure conditions as determined by NYCDOT.
- g. NYCDOT will provide to TBTA the locations of existing NYCDOT cameras, E-ZPass readers, and fiber optic communication network. The disclosure of the locations may be subject to non-disclosure conditions as determined by NYCDOT.
- h. NYCDOT will provide the maintenance, repair and regular replacement of signage required for the Program within the City of New York in strict accordance with Exhibit C attached hereto.
- i. NYCDOT shall provide Contractor OCMC Permits for access required by TBTA's designers and contractors for the purpose of planning, evaluating, surveying, designing, construction, maintaining and operating the infrastructure and the toll collection system equipment. Such Contractor OCMC Permits shall include lane closures, street closures, bridge closures, street opening, sidewalk closures and sidewalk opening, as set forth in Section 6, Permitting, herein.
- j. NYCDOT shall facilitate TBTA's engagement with other City Agencies for the use of existing systems, devices and other facilities owned and operated by other City Agencies for the purposes of the Program.

Unless expressly set forth in this Agreement as a NYCDOT responsibility, TBTA will be responsible for installing, inspecting, maintaining and repairing or replacing the infrastructure. TBTA's responsibilities shall also include providing utility support to the infrastructure, including electricity, and any and all changes in sewers or other subsurface structures necessitated by the construction or removal of the infrastructure, including the laying or relaying of pipes, conduits, sewers or other structures. TBTA shall protect all property, which may in any way be disturbed by the construction of the infrastructure or toll collection system equipment, and it shall replace or restore the Impacted Public Right of Way and any other affected property, which is disturbed during the construction of the infrastructure or toll collection system equipment, consistent with Section 19, Removal or Deactivation of the Infrastructure, herein.

TBTA will be responsible for installing, inspecting, maintaining and repairing or replacing the toll collection system equipment. TBTA's responsibilities shall also include providing utility support to the toll collection system equipment, including electricity, and any and all changes in sewers or other subsurface structures necessitated by the construction or removal of the toll collection system equipment, including the laying or relaying of pipes, conduits, sewers or other structures. TBTA shall protect all property, which may in any way be disturbed by the construction of the infrastructure or toll collection system equipment, and it shall replace or restore the Impacted Public Right of Way and any other affected property, which is disturbed during the construction of the infrastructure or toll collection system equipment, consistent with Section 19, Removal or Deactivation of the Infrastructure, herein.

NYCDOT's review and consultation on any elements of the infrastructure or other components of the Program, or its failure to exercise its right to consult or seek changes in any elements of the infrastructure or other components of the Program, shall not relieve TBTA of its obligation to install, operate, inspect, maintain, repair or remove the infrastructure and to install, operate, inspect, maintain, repair or remove the toll collection system equipment as provided in this Agreement.

8. Engagement with Federal Agencies. It is possible that approval from the United States Department of Transportation ("USDOT"), acting through the Federal Highway Administration ("FHWA"), will be required to implement the Program. If the USDOT determines that the Program requires federal approval:
 - a. TBTA, NYCDOT and the New York State Department of Transportation ("NYSDOT") shall jointly submit an application for such approval.
 - b. TBTA, NYCDOT and NYSDOT shall jointly negotiate any required agreement with USDOT for approval of the Program.
 - c. TBTA, NYCDOT and NYSDOT shall not execute any agreement for the Program with USDOT that bars or limits access to or the use of federal funding by the City, NYSDOT or the MTA.
 - d. TBTA and MTA have hired a consultant to prepare federally-compliant environmental documents for the Program, pursuant to the National

Environmental Policy Act (“NEPA”), Section 4(f) of the Department of Transportation Act, Section 106 of the National Historic Preservation Act, and any other relevant laws. TBTA, MTA and NYCDOT shall establish an environmental review working group that will collaboratively develop the environmental documentation, with NYSDOT. TBTA shall provide NYCDOT with the opportunity to review and comment on draft environmental documents prior to submission to USDOT.

9. Traffic Study. Pursuant to §10 of the Act, TBTA and NYCDOT shall jointly undertake a Traffic Study (the “Traffic Study”) that includes the CBD and surrounding areas that shall be provided to the Traffic Mobility Review Board (as defined in Public Authorities Law §553-k) for purposes of allowing such Board to make recommendations consistent with Public Authorities Law §553-k. The Traffic Study will include an evaluation of the impact of various variable pricing structures and the impacts of any credits, discounts and/or exemptions on traffic and thus on the recommended toll as well as of traffic patterns and environmental impacts including but not limited to air quality and emission trends.
10. Evaluation Report. TBTA may jointly with NYCDOT or individually prepare an Evaluation Report (the “Evaluation Report”) beginning one year after the Operation Date and every two years thereafter. Each Evaluation Report will include but not be limited to an evaluation of the effect of the Program after the Operation Date on traffic congestion in and around the CBD, travel patterns, mass transit usage, environmental improvements and receipts and expenditures relating to the Program. NYCDOT shall assist in gathering and providing TBTA with traffic impact and other related data.
11. Public Outreach. NYCDOT and TBTA agree that the success of the Program depends on public acceptance and understanding and to that end, the parties agree to cooperate and collaborate on a public outreach campaign for the Program.
 - a. TBTA or MTA will provide the draft Public Outreach Plan (POP) to NYCDOT for the purpose of review and consultation.
 - b. To the extent feasible, TBTA or MTA will provide five (5) days advance notice to NYCDOT of all public meetings relating to the infrastructure.
 - c. To the extent feasible, TBTA or MTA will provide outreach materials related to the infrastructure to NYCDOT for review and comment five (5) days prior to public release.
 - d. TBTA or MTA will notify NYCDOT of all meetings with stakeholders related to the installation and operation of the infrastructure.
 - e. NYCDOT will provide staff support to all public outreach meetings related to the infrastructure to the extent practicable and provided NYCDOT received advance notice as detailed above.
12. Design Requirements. TBTA will site and design the infrastructure in accordance with the Design Requirements outlined in Exhibit A hereto, so far as practicable. TBTA will site and design the toll collection system equipment in accordance with applicable Design Requirements outlined in Exhibit A hereto, so far as practicable.

- a. TBTA will provide proposed sites, designs, and engineering drawings to NYCDOT for review and consultation, in accordance with Exhibit A herein.
- b. NYCDOT and TBTA will designate at least one technical subject matter expert to serve on a Technical Expert Panel and be available for consultation by the TBTA selection committee for the contractor that will design, build, and maintain the infrastructure and toll collection system equipment. The NYCDOT technical subject matter expert will attend all oral presentations by proposers and TBTA will provide to the NYCDOT technical subject matter expert portions of all proposals pertaining to the infrastructure. Each subject matter expert shall execute a Conflict of Interest/Non-disclosure Form.

13. Construction Requirements. TBTA will perform all work in strict accordance with the Release for Construction Design Drawings (as defined in Exhibit A) for the infrastructure, in consultation with NYCDOT.

TBTA will take all reasonable efforts to minimize disruption to activities on, and to prevent damage to, any personal property and structures of the NYCDOT and others located at, on or near the Impacted Public Right of Way.

TBTA shall furnish, within ninety (90) days of receipt, to the NYCDOT as-built record documents, showing accurately and distinctly the location, size and type of such construction, and complete dimensions of the infrastructure and toll collection system equipment, as well as the location and dimensions of all substructures encountered during the progress of the work.

14. Coordination with Full and Partial Road Closures. NYCDOT streets and bridges are regularly closed to traffic for maintenance, repair, capital reconstruction, special events (such as parades and street fairs), emergency response, and security purposes (such as during presidential visits and United Nations General Assembly). NYCDOT shall provide advance notice to TBTA of planned closures of any streets that could have an impact on the Program including but not limited to streets in the immediate vicinity of the 60th Street cordon, the FDR Drive, Route 9A, West Street, the Battery Park Underpass, and the Ed Koch Queensboro, Williamsburg, Manhattan, and Brooklyn Bridges. NYCDOT will close streets and bridges at its sole discretion, and it will not be liable for any damages or loss of revenue in connection with the Program resulting from such closures. NYCDOT will make reasonable efforts to mitigate the impact on the program due to such closures, and may facilitate engagement between TBTA and other City Agencies to do the same. NYCDOT, in coordination with NYPD, will develop a process to provide the TBTA Operations Command Center with notifications of unplanned closures as soon as NYCDOT becomes aware of such closures.

15. Maintenance and Repair of Infrastructure and Impacted Public Right of Way. TBTA shall be responsible for the maintenance and repair of the infrastructure and toll collection system.
 - a. The TBTA shall submit a maintenance and repair plan to NYCDOT five (5) to seven (7) days prior to the Operation Date for NYCDOT review and consultation. The plan shall detail TBTA's standard procedures for routine

and emergency maintenance and repair of the infrastructure and the toll collection system equipment, including locations, equipment or vehicles to be used, typical maintenance and protection of traffic plans, time of day restrictions, and typical work duration.

- b. TBTA shall address safety critical repairs, including a fallen or listing infrastructure or any other condition that poses an immediate threat to public safety, as soon as practicable upon notification.
- c. TBTA shall keep the infrastructure, toll collection system equipment and the Impacted Public Right of Way in good, clean, graffiti-free, and safe condition at all times.
- d. TBTA shall give written notice to the NYCDOT at least forty-eight (48) hours before it performs any work to replace any major structural component of the infrastructure, except that no such notice shall be required with respect to any routine maintenance of, or repairs made to, the infrastructure, however, TBTA and its contractors will obtain Contractor OCMC Permits associated with such work as described in Section 6, Permitting.

16. NYCDOT's Rights to Access Impacted Public Right of Way. TBTA shall allow NYCDOT a right of way under, through and above any and all parts of the infrastructure and any portions of the Impacted Public Right of Way subject to the terms below.

NYCDOT will give written notice to TBTA if the infrastructure and toll collection system equipment may be disturbed by work, including but not limited to capital street reconstruction, water main and sewer maintenance, repair, or replacement, or sidewalk reconstruction. At the beginning of each fiscal year, NYCDOT shall provide TBTA with a list of anticipated capital street reconstruction, water main and sewer maintenance, repair or replacement or sidewalk reconstruction projects for the year. NYCDOT shall seek to stage its work in a manner so as to minimize any impact on the infrastructure and toll collection system equipment and shall assist the TBTA in coordination with other City Agencies regarding their work. TBTA or its contractor shall accommodate the work of NYCDOT and other City Agencies by protecting the infrastructure and toll collection system equipment or by replacing the permanently installed infrastructure with temporary infrastructure and toll collection system equipment, deploying mobile toll collection equipment, temporarily relocating the toll collection equipment, or by employing another strategy. The cost of all such replacement, protection, temporary relocation, or use of mobile toll collection equipment shall be at the sole cost and expense of TBTA. The NYCDOT will endeavor to provide thirty (30) day notice of such condition, but it reserves the right to require action sooner in cases of emergency.

17. Preventing NYCDOT Interference with the Infrastructure, Toll Collection System Equipment and/or the Collection of Program Tolls. NYCDOT and its contractors shall not install any street light poles, traffic signal poles, gantries or other street furniture in locations that would interfere with, impair or impede in any way the infrastructure, toll collection system equipment and/or TBTA's collection of Program tolls.

18. Use of NYCDOT Existing Systems, Devices and other Facilities. NYCDOT shall, consistent with this Agreement, grant TBTA permission to mount toll collection system equipment on existing NYCDOT infrastructure, including bridge structures and existing gantry structures.
- a. No toll collection system equipment will be placed on existing streetlight or signal poles if the poles cannot withstand the additional load or if the mounting of such equipment is technically infeasible. NYCDOT may grant TBTA permission to site infrastructure at the location of existing streetlight poles which cannot be used because they cannot withstand the additional load.
 - b. At locations where TBTA places infrastructure at the site of an existing NYCDOT streetlight pole, the infrastructure will include a streetlight luminaire to provide illumination of the vehicle detection area. TBTA shall maintain the luminaire as necessary at its sole cost.
19. Removal or Deactivation of the Infrastructure. If TBTA ceases to use the infrastructure and toll collection system equipment for the Program or after the expiration or termination of this Agreement, within a reasonable period of time, TBTA shall remove the infrastructure and toll collection system equipment, and restore the Impacted Public Right of Way, as well as any other affected City property, to its condition immediately prior to the installation of the infrastructure and toll collection system equipment or to a condition otherwise agreed upon by NYCDOT and TBTA. The removal and restoration shall be at the sole cost and expense of TBTA.
- Notwithstanding the foregoing, TBTA shall be bound by all the terms and conditions of this Agreement, until the infrastructure is removed and the Impacted Public Right of Way and any such other affected City property is restored.
20. Data Sharing. TBTA shall work to share data with NYCDOT. TBTA will provide NYCDOT with a real time data feed, as it becomes available, of vehicles entering the CBD at all entry points to the CBD. At NYCDOT's sole cost (to be deducted by TBTA from an reimbursable costs due to NYCDOT under Section 4, Reimbursement to NYCDOT and Other City Agencies), TBTA shall anonymize the real time data to exclude any personally identifiable information, including license plate numbers or E-ZPass account numbers but the data will include vehicle classifications. On or before the Effective Date, TBTA shall provide NYCDOT with historical data from 2015 to the present of vehicle volumes and classifications on all TBTA crossings.
21. Safety. TBTA shall cause its contractors and consultants to perform work to the infrastructure and toll collection system equipment in the Impacted Public Right of Way with regard to the safety of life and property.
22. Labor. NYCDOT and TBTA agree that nothing in the Agreement or the Program shall be construed to impede, infringe or diminish the rights and benefits that accrue to employees and employers through collective bargaining agreements.

23. Notices. The parties agree that the following persons shall serve as designated persons for the giving or receipt of notices under this Agreement and all notices shall be provided by email and, unless receipt of the e-mail is acknowledged by the recipient by e-mail, by regular mail, as follows:

If to NYCDOT:

Senior Director for Special Projects
New York City Department of Transportation
55 Water Street, 9th floor
New York, NY 10041
Currently: wcarry@dot.nyc.gov

With copy to:
Deputy General Counsel
New York City Department of Transportation
55 Water Street, 9th floor
New York, NY 10041
Currently: spondish@dot.nyc.gov

If to TBTA:

Senior Vice President, Business Operations & Transformation Officer
Triborough Bridge and Tunnel Authority
2 Broadway, 23rd Floor
New York, NY 10004
Currently: acdecerreno@mtabt.org

With copy to:
Senior Vice President and General Counsel
Triborough Bridge and Tunnel Authority
2 Broadway, 24th Floor
New York, NY 10004
Currently: mterry@mtabt.org

24. Dispute Resolution.
- a. If a dispute arises in connection with this Agreement, NYCDOT and TBTA will first attempt to resolve the dispute at the staff level. If the dispute cannot be resolved at the staff level, the parties will elevate the dispute to the NYCDOT Commissioner (or her/his designee) and the MTA Chairman (or her/his designee) (collectively "Parties' Executives"). The Parties' Executives will review the dispute with their respective staffs and participate in a meeting in an attempt to resolve the dispute. If the dispute cannot be resolved at the meeting between the Parties' Executives, then either party may institute a legal action to resolve the dispute.
 - b. Choice of law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

c. Venue. Any action under this Agreement shall be brought in a Court of competent jurisdiction in the State of New York, County of New York.

25. Agreement Subject to Existing Rights. This Agreement is subject to whatever right, title or interests the owners of abutting property or others may have and TBTA acquires no right, title or interest in the property occupied by the infrastructure and toll system equipment.

26. Restrictions Against Transfer of Use of Agreement. This Agreement shall not, either in whole or in part, be sold, assigned, leased or sublet in any manner, without the express written consent of the NYCDOT, which may be granted in its sole, reasonable discretion. Notwithstanding the foregoing, TBTA may freely transfer or sublicense its license to use, maintain and operate the infrastructure and toll collection system equipment to any subsidiary or affiliate agency of TBTA or any successor corporation or corporation into which it may be consolidated or the Metropolitan Transportation Authority ("MTA") without the express written consent of NYCDOT.

27. Laws, Rules and Regulations. TBTA shall strictly conform to all laws, rules and regulations in connection with the Program consistent with Article 44-C of the Vehicle and Traffic Law and it will require that its contractors and consultants obtain Contractor OCMC Permits, in accordance with the requirements of Section 6, Permitting, for all activities including site assessment, construction staging, construction activities, maintenance and repair work requiring TBTA's contractor to occupy, open or close City roadways and sidewalks in connection with the infrastructure and toll collection system equipment in the Impacted Public Right of Way, subject to TBTA's rights pursuant Section 6, Permitting, above.

28. Indemnification and Insurance – TBTA.

To the extent permitted by law, TBTA agrees to defend, indemnify and hold harmless the City, including its officials and employees, against claims for damages by reason of bodily injury or death or damage arising out of work performed by TBTA or its employees, agents, servants, contractors and subcontractors in connection with the infrastructure and/or toll collection system equipment of the Program in the Impacted Public Right of Way and Program signage, as defined in Exhibit C, installed by TBTA or its employees, agents, servants, contractors or subcontractors to the extent that claims for such damages are not covered and paid by insurers or paid by the third parties. However, this indemnification shall not include any damages that result from the acts, omissions or negligence of the City, its agents, employees or representatives.

- a. TBTA shall be solely responsible for the safety and protection of its employees, agents, servants, contractors and subcontractors, and for the safety and protection of the employees, agents, or servants, of its contractors and subcontractors for work performed by TBTA or its employees, agents, servants, contractors and subcontractors on the infrastructure and/or toll collection system equipment in the Impacted Public Right of Way and Program signage.

- b. TBTA shall be solely responsible for taking all reasonable precautions to protect the persons and property of the City or others from damage, loss or injury resulting from any and all work performed by TBTA or its employees, agents, servants, contractors and subcontractors on the infrastructure and/or toll collection system equipment in the Impacted Public Right of Way and Program signage under this Agreement.
- c. TBTA shall conduct operations in connection with work performed by TBTA or its agents and assigns on the infrastructure and/or toll collection system equipment in the Impacted Public Right of Way and Program signage in compliance with, and shall not cause or permit violation of any and all applicable federal, or state environmental, health and/or safety-related laws, regulations, standards, decisions of the courts consistent with Article 44-C of the Vehicle and Traffic Law, Contractor OCMC Permits or Contractor OCMC Permit conditions consistent with this Agreement, currently existing or as amended or adapted in the future which are or become applicable to operations under this Agreement (collectively "Environmental Laws"). Except as may be agreed by the NYCDOT as part of this Agreement, TBTA shall not cause or permit, or allow any of TBTA's personnel to cause or permit any Hazardous Materials to be brought upon, stored, used, generated, treated or disposed of on any property in connection with operations under this Agreement. Existing Hazardous Materials which may be disturbed by the work shall be abated and disposed of in accordance with TBTA Standard Specifications. As used herein, "Hazardous Materials" means any chemical, substance or material which is now or becomes in the future listed, defined or regulated in any manner by any Environmental Law based upon, directly or indirectly, its properties or effects.
- d. During the entire term of this Agreement, TBTA shall require that any of its contractors performing work in connection with the infrastructure and/or toll collection system equipment in the Impacted Public Right of Way and Program signage add the City, including its officials and employees, as additional insureds to any insurance policy required by NYCDOT pursuant to Exhibit B attached hereto.

29. Indemnification and Insurance – NYCDOT.

NYCDOT agrees to defend, indemnify and hold harmless TBTA, including its officials and employees, against claims for damages by reason of bodily injury or death or damage arising out of work performed by NYCDOT or its employees, agents, servants, contractors and subcontractors in or around the Impacted Public Right of Way that impacts the infrastructure or toll collection system equipment and in connection with Program signage, as defined in Exhibit C, to the extent that claims for such damages are not covered and paid by insurers or paid by the third parties, excluding, however, this indemnification shall not include any damages that result from the acts, omissions or negligence of TBTA, its employees, agents, servants, contractors and subcontractors.

- a. NYCDOT shall be solely responsible for the safety and protection of its employees, agents, servants, contractors and subcontractors, and for the

safety and protection of the employees, agents, or servants of its contractors and subcontractors for work performed in or around the Impacted Public Right of Way that impacts the infrastructure or toll collection system equipment and in connection with Program signage.

- b. NYCDOT shall be solely responsible for taking all reasonable precautions to protect the persons and property of TBTA or others from damage, loss or injury resulting from any and all work by NYCDOT.
 - c. NYCDOT shall conduct operations in connection with the work performed in and around the Impacted Public Right of Way that impacts the infrastructure or toll collection system equipment and in connection with Program signage in compliance with, and shall not cause or permit violation of any and all applicable federal, state or local environmental, health and/or safety-related laws, regulations, standards, decisions of the courts, authorizations, currently existing or as amended or adapted in the future which are or become applicable to operations under this Agreement (collectively "Environmental Laws"). Except as may be agreed by TBTA as part of this Agreement, NYCDOT shall not cause or permit, or allow any of NYCDOT's personnel to cause or permit any Hazardous Materials to be brought upon, stored, used, generated, treated or disposed of on any property in connection with operations under this Agreement. As used herein, "Hazardous Materials" means any chemical, substance or material which is now or becomes in the future listed, defined or regulated in any manner by any Environmental Law based upon, directly or indirectly, its properties or effects.
 - d. During the entire term of this Agreement, NYCDOT shall require that any of its contractors performing work in connection with Program signage to add TBTA, the Metropolitan Transportation Authority, including its subsidiaries and affiliates and their officials and employees, as additional insureds to any insurance policy required by TBTA.
30. Notice of Claims. The parties will (i) notify each other promptly of any personal injury or property damage occurring to or claimed by any occupant, individual or entity on or relating to the Impacted Public Right of Way in connection with the Program of which it has knowledge; (ii) forward to each other copies of any summons, subpoena, or other like legal document received relating to the Impacted Public Right of Way and Program signage, as defined in Exhibit C, in connection with the Program; and (iii) notify each other promptly of any subpoena, demand for documents under the Freedom of Information Law ("FOIL") or other like legal document received relating to Program documents that NYCDOT has obtained from TBTA, on the one hand, and that TBTA has obtained from NYCDOT, on the other.
31. All Legal Provisions Deemed Included. Each and every provision required by law applicable to this Agreement is hereby deemed to be a part of this Agreement, whether actually inserted or not.

32. Severability/Unlawful Provisions Deemed Stricken. If this Agreement contains any unlawful provision not an essential part of the Agreement, the unlawful provision shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the Agreement without affecting the binding force of the remainder.
33. Advertising. No advertisement or other materials unrelated to the operation of the Program shall be placed on, affixed to, programed from, or in any way displayed on the Impacted Public Right of Way by TBTA or its contractor unless expressly authorized in writing by the NYCDOT.
34. Modification or Amendment. This Agreement may not be modified or amended except by written agreement executed by the parties hereto.
35. No Third Party Beneficiaries. Nothing in this Agreement, express or implied is intended to confer on any person or entity, other than TBTA, MTA, the City and NYCDOT, any rights or remedies under or by reason of this Agreement.
36. Counterparts. This Agreement may be executed in one or more counterparts which, when taken together, shall constitute one and the same.
37. NYCDOT Signage. Notwithstanding any other provisions of this agreement, NYCDOT may place regulatory street signage on infrastructure in locations that do not obstruct the operation of the Program with prior written permission from TBTA. Upon request from TBTA, NYCDOT will remove any such signage from the infrastructure.


In Witness Whereof, the parties hereto have caused this Agreement to be executed.

Accepted and agreed to:

NYCDOT:

The City of New York

By:


(Signature)

Dean Fulkhan
(Print Name of Signatory)

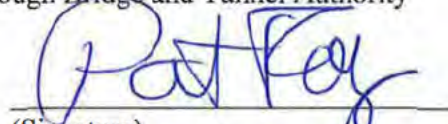
First Deputy Mayor
(Title)

6/11/2019
(Date)

TBTA:

Triborough Bridge and Tunnel Authority

By:


(Signature)

PATRICK J. FOYE
(Print Name of Signatory)

CHAIRMAN + CEO
(Title)

6/11/2019
(Date)

Approved as to Form

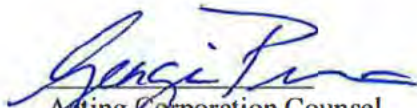

Acting Corporation Counsel
Date: 6/11/2019

Exhibit A: Design Requirements

The design of the infrastructure shall adhere to the following principles and guidelines, so far as practicable:

Design and Siting Principles:

1. The infrastructure will be sited and designed so as to protect the safety of all road users, including pedestrians, cyclists, and motorists.
2. The infrastructure will be sited and designed so as to not further impede pedestrian and cyclist circulation, the path of travel for persons with disabilities, bus boarding at bus stops, curb access for pick-ups and drop-offs, and access for emergency vehicles.
3. At surface street locations where sidewalk space is constrained and/or there are very high pedestrian volumes, TBTA will consider expanding the sidewalk to accommodate the infrastructure.
4. Infrastructure should be designed to have as minimal a visual profile where feasible as determined by TBTA.
5. At surface street locations, the infrastructure will have the same or similar appearance to the extent feasible as determined by TBTA as adjacent NYCDOT standard signal and streetlight poles or as NYCDOT's family of street furniture.
6. At surface street locations within landmark districts, the infrastructure will have the same or similar appearance as the decorative light and signal poles or other street furniture used in that district to the extent feasible as determined by TBTA.
7. Infrastructure on NYCDOT structures, including ramps and bridges, shall be designed so as to minimize any structural impacts on the underlying structures.

Siting Guidelines:

8. At surface street locations, new poles will be placed at the location of existing streetlight poles where feasible as determined by TBTA. The streetlight will be replaced with a new structure, which shall include a streetlight luminaire to provide illumination of the vehicle detection area. TBTA shall maintain the structure and the vehicle detection area luminaire.
9. At surface street locations, infrastructure will be placed in accordance with NYCDOT's required clearances for street furniture, to the greatest extent possible.
10. At surface street locations, infrastructure will be placed so as not to block sightlines for traffic control signs and signals.
11. At surface street locations, supporting cabinets will be placed on poles, underground, or in adjacent buildings to the extent feasible as determined by TBTA. In areas with constrained pedestrian circulation, pole-mounted equipment should be placed above the pedestrian plane to the extent feasible as determined by TBTA.
12. Infrastructure will not be placed directly at intersections; TBTA will use mid-block locations to avoid conflicts with pedestrians, ADA requirements, and street user sightlines to the extent feasible as determined by TBTA.
13. Infrastructure will not be placed immediately in front of historic landmarks to the extent feasible as determined by TBTA.
14. Infrastructure will be placed so as to not block significant view corridors of historic landmarks, scenic landmarks, or open spaces, to the extent feasible as determined by TBTA.
15. TBTA will place infrastructure on the ramps of roadways with access and exit ramps and avoid placing structures in the immediate vicinity of where bridge ramps meet the surface street grid to the extent feasible as determined by TBTA.

16. On bridges, TBTA will consider maintenance access when siting cabinets and other supporting equipment so as not to necessitate lane closures for maintenance and repair.

Design and Engineering Standards

Notwithstanding anything to the contrary herein or in the requirements set forth below, in accordance with Vehicle & Traffic Law §1704(6), TBTA and its contractors shall not be subject to the provisions of article eight of the environmental conservation law, the provisions of chapter six of article forty-three or chapter five of title sixty-two of the rules of the City of New York, or the provisions of section one hundred ninety-seven-c of the New York City Charter, relating to a uniform land use review procedure, nor the provisions of any other local law of the City of New York of like or similar effect including approvals or charges associated with the use of property owned and maintained by the City of New York necessary for the installation of the infrastructure.

The guidance documents below are generally listed in the order of precedence; however, in the event of a conflict among them, TBTA will consult with NYCDOT to resolve or reconcile the conflict.

Only references to Materials, Products, Standards and Construction in the following documents apply. References to sections including but not limited to measurement, prices, items, pay units, payments, guarantees, lists of spare parts, delivery do not apply.

General

1. NYCDOT Specifications, including:
 - o NYCDOT Standard Highway Specifications Vol. 1 and 2, specifically excluding Division 1
 - o NYCDOT Standard Details of Construction
 - o NYCDOT Specification for Traffic Signals and Intelligent Transportation Systems Construction and Equipment, specifically excluding Section GS.1 NYCDOT General Specifications
 - o NYCDOT Standard Drawings for Traffic Signals
 - o NYCDOT Standard Typical Markings Specifications
2. FHWA Manual on Uniform Traffic Control Devices (MUTCD)
3. AASHTO Policy on Geometric Design of Highways and Streets (Green Book)
4. NYCDOT Street Design Manual
5. Other Relevant NYCDOT Specifications

Bridge Specific

1. NYSDOT bridge and construction standards which can be found at the NYSDOT website: <https://www.dot.ny.gov/publications>, with TBTA Exceptions.
2. AASHTO: LRFD Bridge Design Specifications, Manual for Bridge Evaluation, Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals

General Guidance Documents

1. NACTO Street Design Guide

NYCDOT Review and Consultation.

TBTA intends to conduct a five step process for the design of the infrastructure. At each step, TBTA shall provide design documents to NYCDOT upon completion of TBTA's initial review of design documents from TBTA's contractor for completeness and applicability. TBTA shall convene a design review meeting with NYCDOT, and document NYCDOT design comments and TBTA responses to those comments. NYCDOT shall designate a team of design reviewers empowered to make design decisions on behalf of the agency. NYCDOT's design reviews shall be limited to ensuring compliance with the Contract Documents. The NYCDOT design review team will be afforded the same number of days to perform their reviews as the TBTA design review team.

The NYCDOT liaison team shall coordinate reviews among other City Agencies, such as but not limited to, the New York City Department of Design and Construction, the New York City Department of Environmental Protection, the New York City Department of Parks and Recreation, the New York City Fire Department, and the New York City Police Department, and provide consolidated comments to TBTA and assist in the timely resolution of such comments.

In the event that TBTA proposes placing infrastructure or toll collection system equipment on a NYCDOT bridge ramp, bridge, or bridge or highway gantry, TBTA shall conduct an inspection and structural analysis in accordance with the design and engineering standards, provide the analysis, including calculations, to NYCDOT for review, and document NYCDOT comments and TBTA responses to those comments. In the event that TBTA proposes placing toll collection system equipment on existing streetlight poles or on new poles or structures, TBTA shall conduct a structural analysis in accordance with the design and engineering standards, provide the analysis to NYCDOT for review, and document NYCDOT comments and TBTA responses to those comments. NYCDOT shall review and provide its response for both types of structural analyses within five (5) calendar days. NYCDOT shall not unreasonably withhold consent for TBTA's use of the existing streetlight poles, signal poles and sign gantries.

The TBTA design process is shown below. TBTA shall direct its contractor to incorporate NYCDOT reviews into the Design Review Plan. Design documents for steps 2-5 shall include at a minimum: civil, MPT, signage, street marking, and utility plans and elevations and sections of the infrastructure.

Step	Description	Review Period
1. Proposal	Review of infrastructure concepts for each of the respondents to the DBOM RFP	14 calendar days
2.e Preliminary Design	Selected TBTA contractor's first submission; level to be determined	5 calendar days
3.e Detailed Design	Selected TBTA contractor's second submission; level to be determined	5 calendar days
4.e Final Design	100% design	5 calendar days
5.e Release for Construction Design	Final review prior to construction	5 calendar days

Exhibit B

A. Insurance – TBTA’s Contractor’s Insurance

TBTA shall cause its contractor, at its contractor’s sole cost and expense, to procure policies of insurance to be in force and maintained at all times during the installation and maintenance of the infrastructure and/or toll collection system equipment in the Impacted Public Right of Way and Program signage in accordance with the terms set forth below:

1. TBTA’s contractor shall maintain or cause to be maintained Commercial General Liability (CGL) insurance protecting the insureds from claims for property damage and/or bodily injury, including death, arising out of or in connection with this Agreement or the construction, existence, use or removal of the infrastructure, toll collection system equipment and Program signage, as defined in Exhibit C. This insurance shall be in the amount of at least Two Million Dollars (\$2,000,000) per occurrence and Ten Million Dollars (\$10,000,000) aggregate. Coverage shall be at least as broad as that provided by the most recently issued Insurance Services Office (“ISO”) Form CG 0001.
2. The CGL insurance shall name the City of New York, together with its officials and employees, as an Additional Insured with coverage at least as broad as the most recent edition of ISO Forms CG 2026 and 2037. The City’s limits of coverage for the CGL insurance required shall be the greater of (i) the minimum limits set forth in this Agreement or (ii) the limits provided to TBTA under all primary, excess and umbrella policies covering operations under this Agreement.
3. Prior to commencement of any work within the Impacted Public Right of Way or in connection with Program signage, TBTA’s contractor shall submit proof of the required insurance in a form acceptable to the NYCDOT prior to the beginning of any work within the Impacted Public Right of Way and/or in connection with Program signage. This shall include (i) a Certificate of Insurance certifying the issuance and effectiveness of such insurance with the specified minimum limits and the status of the City of New York as additional insured (with coverage at least as broad as the most recent edition of ISO Forms CG 2026 and 2037), and (ii) a duly executed Certification by Broker in the form required by the NYCDOT. In addition, prior to the expiration date of all policies, TBTA’s contractor shall submit proof satisfactory to the NYCDOT of either renewals of such policies or the issuance of new policies in compliance with the requirements herein. Notwithstanding the foregoing, TBTA’s contractor shall be obligated to provide the City with a copy of any policy of insurance required hereunder upon request.
4. Acceptance by NYCDOT of a Certificate of Insurance or any other action or inaction by NYCDOT does not waive the obligation of TBTA’s contractor to ensure that insurance, fully consistent with the requirements herein, is secured and maintained, nor does it waive the liability of TBTA’s contractor for its failure to do so.

5. TBTA's contractor may propose to satisfy its insurance obligations through a type of insurance other than Commercial General Liability insurance so long as such insurance provides materially the same level of coverage, both for TBTA and the City, as otherwise required herein. NYCDOT, in its sole discretion, will determine whether such insurance satisfies the insurance obligations of TBTA's contractor hereunder.
6. Where notice of loss, damage, occurrence, accident, claim or suit is required under a policy maintained in accordance with this Agreement, TBTA's contractor shall notify in writing all insurance carriers that issued potentially responsive policies of any such event relating to, arising out of or in connection with this Agreement or the construction, existence, use or removal of the infrastructure, toll collection system equipment and Program signage no later than twenty (20) days after such event. Such notice shall expressly specify that "this notice is being given on behalf of the City of New York as Insured as well as the Named Insured." Such notice shall also contain the following information: the number of the insurance policy, the name of the named insured, the date and location of the damage, occurrence, or accident, and the identity of the persons or things injured, damaged or lost. TBTA's contractor shall simultaneously send a copy of such notice to the City of New York c/o Insurance Claims Specialist, Affirmative Litigation Division, New York City Law Department, 100 Church Street, New York, New York 10007.
7. In the event TBTA's contractor receives notice, from an insurance company or other person, that any insurance policy required under this Agreement shall expire or be cancelled or terminated (or has expired or been cancelled or terminated) for any reason, TBTA's contractor shall immediately forward a copy of such notice to NYCDOT. Notwithstanding the foregoing, TBTA's contractor shall ensure that there is no interruption in any of the insurance coverage required hereunder.
8. Policies of insurance required under this Agreement shall be primary and non-contributing to any insurance or self-insurance maintained by the City.
9. Wherever this Agreement requires that insurance coverage be "at least as broad" as a specified form (including all ISO forms), there is no obligation that the form itself be used, provided that TBTA's contractor can demonstrate that the alternative form or endorsement contained in its policy provides coverage at least as broad as the specified form.
10. The insurance coverage required herein shall not relieve TBTA of any liability under this Agreement, nor shall it preclude the City from exercising any rights or taking such other actions as are available to it under any other provisions of this Agreement or the law.

Exhibit C: Maintenance, Repair and Replacement of Program Signage

1. TBTA shall cause its contractor to fabricate and install the initial signage required for the Program within the City of New York ("Program signage").
2. NYCDOT shall perform maintenance, repair and regular replacement of static Program signage within the City of New York to the satisfaction of TBTA. NYCDOT shall commence such services when TBTA begins collecting tolls under the Program, or as directed by TBTA.
 - a. If NYCDOT fails to perform such maintenance, repair and regular replacement of Program signage within the City of New York to the satisfaction of TBTA, TBTA shall have the right to terminate this portion of the Agreement with thirty (30) days' notice to NYCDOT ("termination notice").
 - b. Upon receipt of the termination notice, NYCDOT shall stop all work in connection with the maintenance, repair and replacement of Program signage. NYCDOT shall be entitled only to those approved actual reimbursable costs incurred in connection with the maintenance, repair and replacement of Program signage prior to the receipt of the termination notice.
 - c. If TBTA terminates this portion of the Agreement and undertakes its own signage maintenance, repair and replacement program, then TBTA shall install signs based on standards agreed upon with NYCDOT, and will conduct all work in accordance with Section 6, Permitting, of the Agreement.
3. NYCDOT shall address safety critical repairs within three (3) days. NYCDOT shall respond at its earliest availability to any situation where there is an imminent threat to life safety.
 - a. If NYCDOT fails to repair or replace such Program signage within three (3) days of notice or immediate repair or replacement is necessary, TBTA shall have the right to cause such repair or replacement to be made and will conduct all work in accordance with Section 6, Permitting, of the Agreement.
 - b. TBTA shall provide notification to NYCDOT of any such work occurring within one business day of that work, including time, date, location, support type, and sign type.
4. NYCDOT shall establish a process for TBTA or its contractor to submit routine maintenance, repair, and replacement requests to NYCDOT.
 - a. NYCDOT will address TBTA maintenance, repair, or regular replacement requests within thirty (30) days.
 - b. If NYCDOT fails to respond to a maintenance, repair and regular replacement request within thirty (30) days, TBTA shall have the right to cause such routine maintenance, repair or replacement and will conduct all work in accordance with Section 6, Permitting, of the Agreement.

- c. TBTA shall provide notification to NYCDOT of any such work occurring within one business day of that work, including time, date, location, support type, and sign type.
- 5. NYCDOT will also perform other sign replacement or modifications as requested by TBTA in connection with the Program, beyond regular replacement, including but not limited to signs reflecting toll rate changes, provided that TBTA provides at least sixty (60) days' notice of any changes needed to signs.
 - a. If NYCDOT fails to respond to such sign replacement or modification request within sixty (60) days, TBTA shall have the right to cause such a replacement or modification and will conduct all work in accordance with Section 6, Permitting, of the Agreement.
 - b. TBTA shall provide notification to NYCDOT of any such work occurring within one business day of that work, including time, date, location, support type, and sign type.
- 6. During the first year of performing maintenance, repair and regular replacement of the Program signage, NYCDOT shall notify TBTA if it identifies any pattern of flaws or defects in Program signage that may arise from defects in the material or workmanship of such signage so that TBTA has an opportunity to have such defects repaired by TBTA's contractor.

2D, CBD Tolling Program Signage

Figure 2D-1. Overview of Areas Containing Project Signage



Figure 2D-2. Typical Signage along Avenues Approaching 60th Street

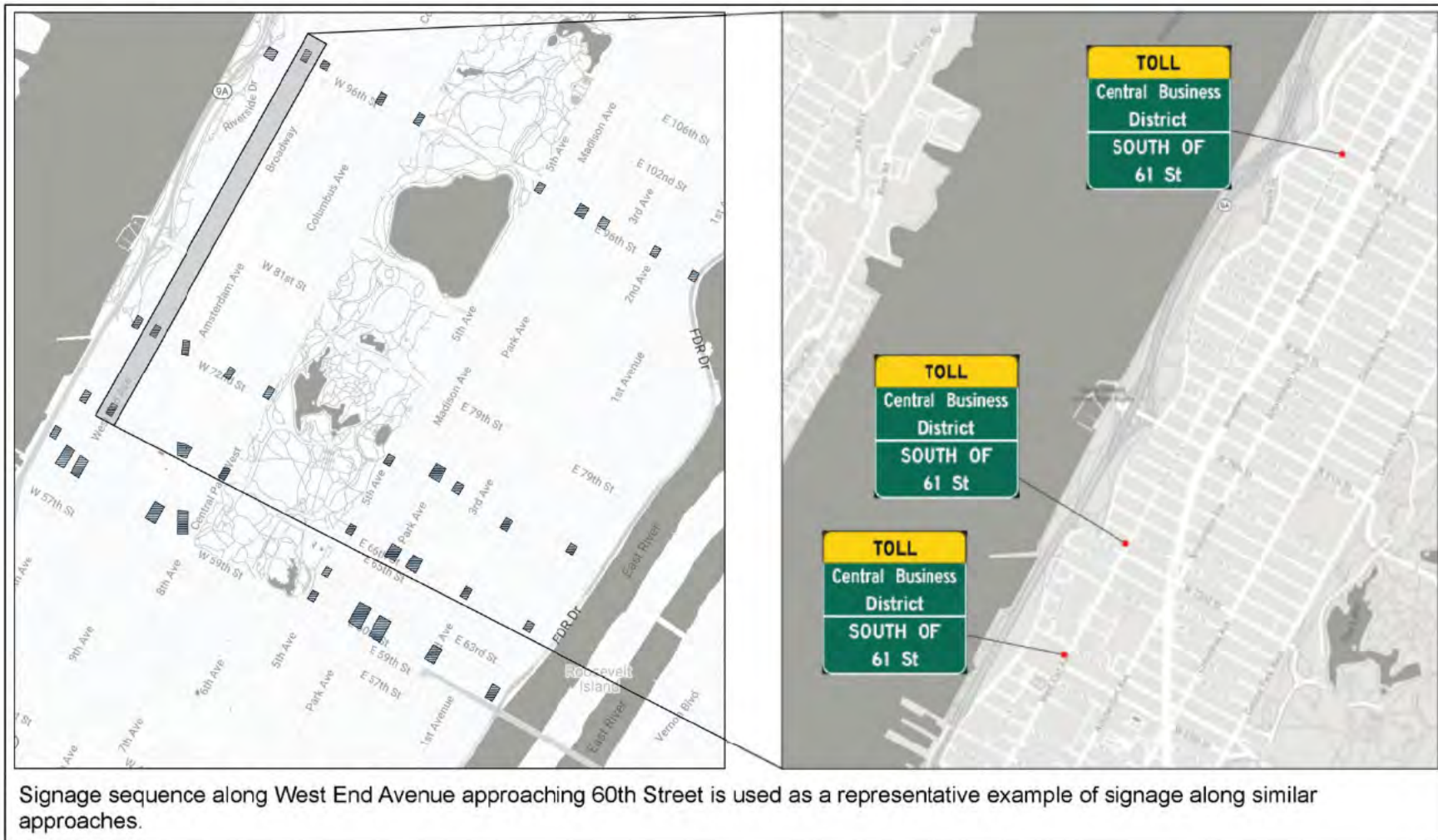


Figure 2D-3. Typical Signage in Vicinity of 60th Street

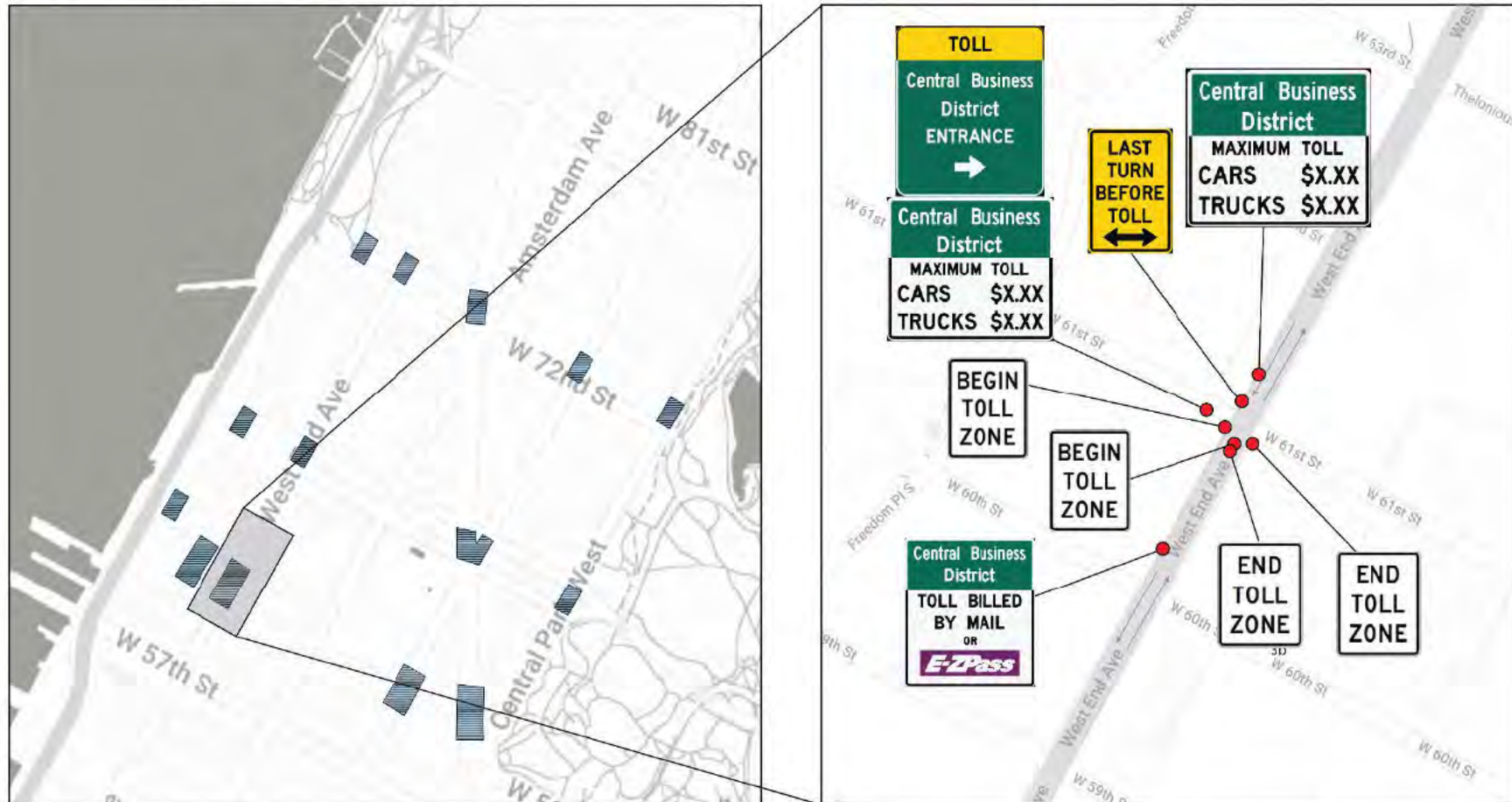


Figure 2D-4. Typical Signage at FDR Drive Entries and Exits

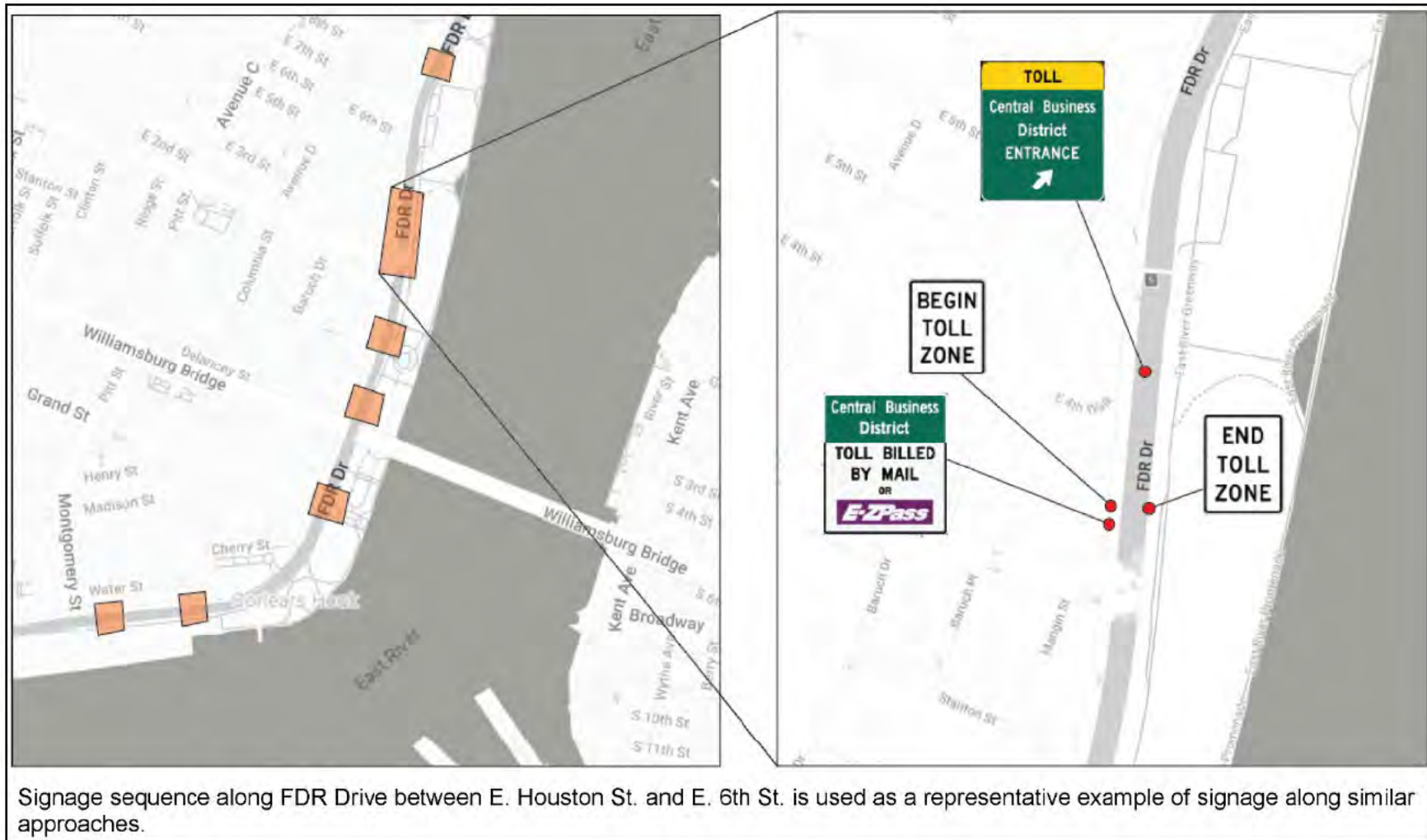


Figure 1: Representative Signage Sequence. This figure consists of two panels. The left panel is a grayscale aerial map of a city street grid, with several orange rectangular boxes highlighting specific locations along West Side Highway/Route 9A. The right panel is a detailed diagram of the signage sequence for the Central Business District (CBD) entrance and exit. It shows the layout of toll signs, including "TOLL" signs with yellow backgrounds, "Central Business District ENTRANCE" signs with green backgrounds and white arrows, and "TOLL BILLED BY MAIL OR E-ZPass" signs with purple backgrounds. The diagram also indicates "BEGIN TOLL ZONE" and "END TOLL ZONE" points with red dots and labels. The signs are positioned along West Side Highway/Route 9A, with various streets like Morris St. and W. Thames St. labeled.

Figure 2D-6. Typical Signage from East River Crossing into the Manhattan CBD

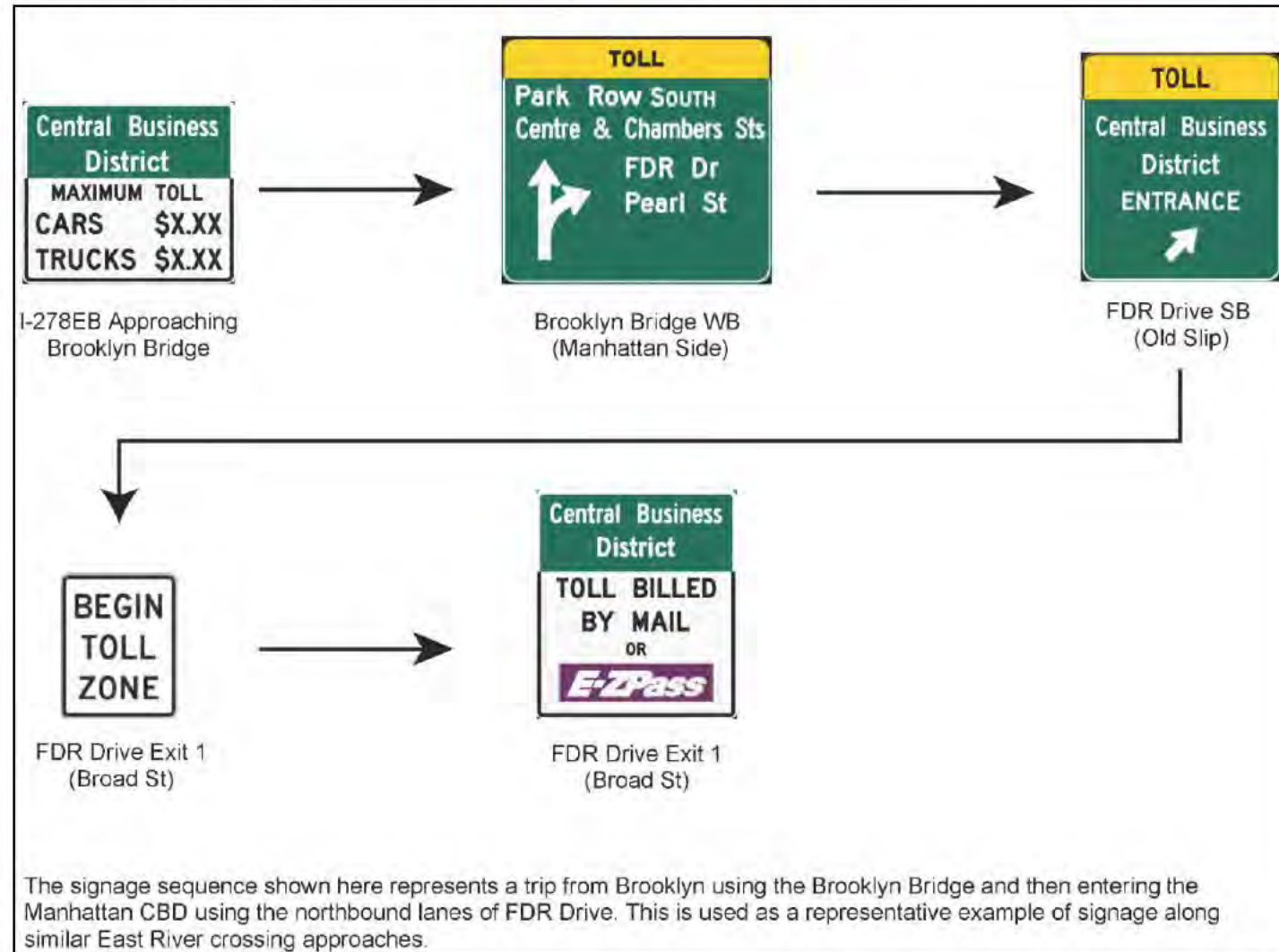
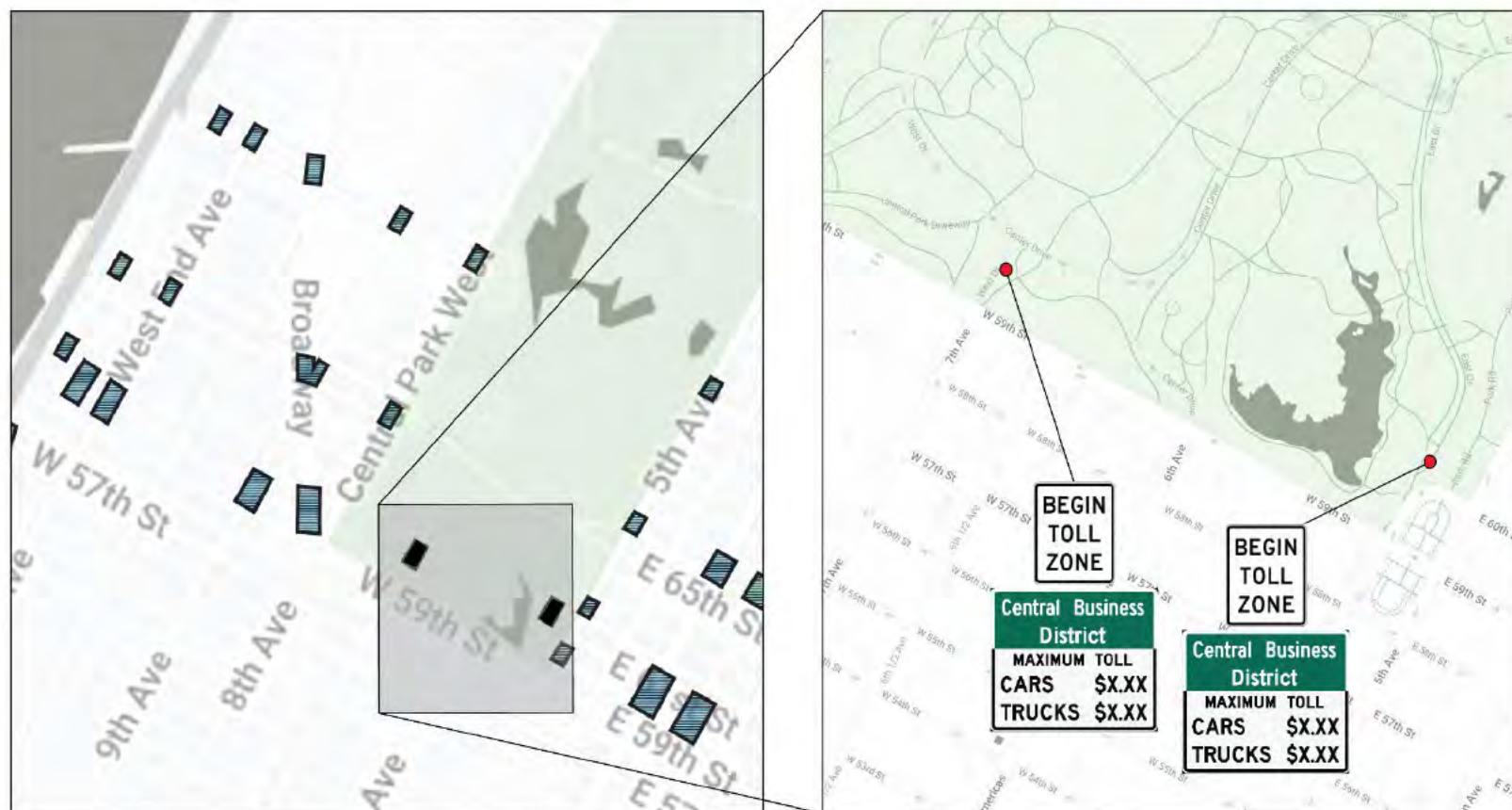


Figure 2D-7. Signage in Central Park



2E, Definition of Tolling Scenarios

Table 2E-1. Tolling Scenarios Evaluated in this Environmental Assessment

PARAMETER ¹	SCENARIO A Base Plan	SCENARIO B ⁴ Base Plan with Caps and Exemptions	SCENARIO C Low Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	SCENARIO D High Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD	SCENARIO E High Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	SCENARIO F High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	SCENARIO G Base Plan with Same Tolls for All Vehicle Classes
TOLL RATES^{2,3}							
Off-Peak Toll							
Weekday Off-Peak Hours	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.	10 a.m. to 4 p.m.	8 p.m. to 10 p.m.
Off-Peak Auto E-ZPass Rate	\$6.90	\$7.61	\$10.50	\$14.27	\$17.25	\$17.25	\$8.70
Off-Peak Auto Tolls by Mail Rate	\$10.35	\$11.42	\$15.75	\$21.40	\$25.88	\$25.88	\$12.15
Off-Peak Small Truck E-ZPass Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$48.75	\$8.70
Off-Peak Small Truck Tolls by Mail Rate	\$20.70	\$22.84	\$31.50	\$42.80	\$51.75	\$63.75	\$12.15
Off-Peak Large Truck E-ZPass Rate	\$20.70	\$22.84	\$31.50	\$42.80	\$51.75	\$61.50	\$8.70
Off-Peak Large Truck Tolls by Mail Rate	\$31.05	\$34.26	\$47.25	\$64.19	\$77.63	\$78.75	\$12.15
Peak Toll							
Weekday Peak Hours	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.	6 a.m. to 10 a.m.; 4 p.m. to 8 p.m.	6 a.m. to 8 p.m.
Weekend Peak Hours	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.
Peak Auto E-ZPass Rate	\$9.20	\$10.15	\$14.00	\$19.02	\$23.00	\$23.00	\$11.60
Peak Auto Tolls by Mail Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$34.50	\$16.20
Peak Small Truck E-ZPass Rate	\$18.40	\$20.30	\$28.00	\$38.04	\$46.00	\$65.00	\$11.60
Peak Small Truck Tolls by Mail Rate	\$27.60	\$30.45	\$42.00	\$57.06	\$69.00	\$85.00	\$16.20
Peak Large Truck E-ZPass Rate	\$27.60	\$30.45	\$42.00	\$57.06	\$69.00	\$82.00	\$11.60
Peak Large Truck Tolls by Mail Rate	\$41.40	\$45.68	\$63.00	\$85.59	\$103.50	\$105.00	\$16.20
Overnight Toll							
Weekday Overnight Hours	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.	8 p.m. to 6 a.m.	10 p.m. to 6 a.m.
Weekend Overnight Hours	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.
Overnight Auto E-ZPass Rate	\$4.60	\$5.08	\$7.00	\$9.51	\$11.50	\$11.50	\$6.96
Overnight Auto Tolls by Mail Rate	\$6.90	\$7.61	\$10.50	\$14.27	\$17.25	\$17.25	\$9.72
Overnight Small Truck E-ZPass Rate	\$9.20	\$10.15	\$14.00	\$19.02	\$23.00	\$32.50	\$6.96
Overnight Small Truck Tolls by Mail Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$42.50	\$9.72
Overnight Large Truck E-ZPass Rate	\$13.80	\$15.23	\$21.00	\$28.53	\$34.50	\$41.00	\$6.96
Overnight Large Truck Tolls by Mail Rate	\$20.70	\$22.84	\$31.50	\$42.80	\$51.75	\$52.50	\$9.72

Appendix 2E, Project Alternatives: Definition of Tolling Scenarios

PARAMETER ¹	SCENARIO A Base Plan	SCENARIO B ⁴ Base Plan with Caps and Exemptions	SCENARIO C Low Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	SCENARIO D High Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD	SCENARIO E High Crossing Credits for Vehicles Using Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	SCENARIO F High Crossing Credits for Vehicles Using Manhattan Bridges and Tunnels to Access the Manhattan CBD, with Some Caps and Exemptions	SCENARIO G Base Plan with Same Tolls for All Vehicle Classes
POTENTIAL CROSSING CREDITS							
Credit Toward the CBD Toll for Tolls Paid at the Queens-Midtown, Hugh L. Carey, Lincoln, Holland Tunnels	No	No	Yes	Yes	Yes	Yes	No
Credit Toward the CBD Toll for Tolls Paid at the Robert F. Kennedy, Henry Hudson, George Washington Bridges	No	No	No	No	No	Yes	No
Level of Credits	NA	NA	Up to \$6.55	Up to \$13.10	Up to \$13.10	Up to \$13.10	NA
POTENTIAL EXEMPTIONS AND LIMITS (CAPS) ON NUMBER OF TOLLS PER DAY							
Autos and motorcycles	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day
Commercial vans	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day	Once per day
Taxis	No cap	Once per day	Exempt	No cap	Exempt	Once per day	No cap
For-hire vehicles	No cap	Once per day	Three times per day	No cap	Three times per day	Once per day	No cap
Small and large trucks	No cap	Twice per day	No cap	No cap	No cap	Once per day	No cap
Buses	No cap	Exempt	No cap	No cap	Transit buses – Exempt No cap on other buses	Exempt	No cap

- 1 The parameters in this table were assumed for modeling purposes to allow an evaluation of the range of potential effects would result from implementation of the CBD Tolling Alternative. Actual toll rates, potential credits/exemptions, and/or other discounts, and the time of day when the toll rates would apply, would be determined by the TBTA Board after recommendation by the Traffic Mobility Review Board.
- 2 Tolls may be higher during peak periods, which are periods when traffic is greatest in the Manhattan CBD. These would be defined by TBTA in the final toll schedule. All tolling scenarios also include a variable toll on designated "Gridlock Alert" days, although the modeling conducted for the Project did not reflect this higher toll since it considers typical days rather than days with unusually high traffic levels.
- 3 Motorcycles and commercial vans would pay the auto rate.
- 4 For Tolling Scenario B, a toll rate of approximately \$13.20 for autos would be necessary to meet the objective of raising sufficient revenue to fund \$15 billion for the MTA Capital Program; see Table 2E-2 for more information on this modified tolling scenario, Tolling Scenario B1.

Table 2E-2. Additional Tolling Scenarios Considered: Tolling Scenarios B1 and G1

PARAMETER ¹	SCENARIO B1	SCENARIO G1
	Base Plan with Caps and Exemptions [<i>Meets Revenue Target</i>]	Base Plan with Same Tolls for All Vehicle Classes, and Cap for Taxis/FHVs
TOLL RATES^{2, 3}		
Off-Peak Toll		
Weekday Off-Peak Hours	8 p.m. to 10 p.m.	8 p.m. to 10 p.m.
Off-Peak Auto E-ZPass Rate	\$9.90	\$9.57
Off-Peak Auto Tolls by Mail Rate	\$14.84	\$13.37
Off-Peak Small Truck E-ZPass Rate	\$19.79	\$9.57
Off-Peak Small Truck Tolls by Mail Rate	\$29.69	\$13.37
Off-Peak Large Truck E-ZPass Rate	\$29.69	\$9.57
Off-Peak Large Truck Tolls by Mail Rate	\$44.53	\$13.37
Peak Toll		
Weekday Peak Hours	6 a.m. to 8 p.m.	6 a.m. to 8 p.m.
Weekend Peak Hours	10 a.m. to 10 p.m.	10 a.m. to 10 p.m.
Peak Auto E-ZPass Rate	\$13.20	\$12.76
Peak Auto Tolls by Mail Rate	\$19.79	\$17.82
Peak Small Truck E-ZPass Rate	\$26.39	\$12.76
Peak Small Truck Tolls by Mail Rate	\$39.59	\$17.82
Peak Large Truck E-ZPass Rate	\$39.59	12.76
Peak Large Truck Tolls by Mail Rate	\$59.38	\$17.82
Overnight Toll		
Weekday Overnight Hours	10 p.m. to 6 a.m.	10 p.m. to 6 a.m.
Weekend Overnight Hours	10 p.m. to 10 a.m.	10 p.m. to 10 a.m.
Overnight Auto E-ZPass Rate	\$6.60	\$7.66
Overnight Auto Tolls by Mail Rate	\$9.90	\$10.69
Overnight Small Truck E-ZPass Rate	\$13.20	\$7.66
Overnight Small Truck Tolls by Mail Rate	\$19.79	\$10.69
Overnight Large Truck E-ZPass Rate	\$19.79	\$7.66
Overnight Large Truck Tolls by Mail Rate	\$29.69	\$10.69

Appendix 2E, Project Alternatives: Definition of Tolling Scenarios

PARAMETER ¹	SCENARIO B1	SCENARIO G1
	Base Plan with Caps and Exemptions [<i>- Meets Revenue Target</i>]	Base Plan with Same Tolls for All Vehicle Classes, and Cap for Taxis/FHVs
POTENTIAL CROSSING CREDITS		
Credit Toward the CBD Toll for Tolls Paid at the Queens-Midtown, Hugh L. Carey, Lincoln, Holland Tunnels	No	No
Credit Toward the CBD Toll for Tolls Paid at the Robert F. Kennedy, Henry Hudson, George Washington Bridges	No	No
Level of Credits	NA	NA
Autos and motorcycles	Once per day	Once per day
Commercial vans	Once per day	Once per day
Taxis	Exempt	Once per day
For-hire vehicles	Exempt	Once per day
Small and large trucks	No cap	No cap
Buses	Transit buses – Exempt No cap on other buses	No cap

¹ The parameters in this table were assumed for modeling purposes to allow an evaluation of the range of potential effects would result from implementation of the CBD Tolling Alternative. Actual toll rates, potential credits/exemptions, and/or other discounts, and the time of day when the toll rates would apply, would be determined by the TBTA Board after recommendation by the Traffic Mobility Review Board.

² Tolls may be higher during peak periods, which are periods when traffic is greatest in the Manhattan CBD. These would be defined by TBTA in the final toll schedule. All tolling scenarios also include a variable toll on designated "Gridlock Alert" days, although the modeling conducted for the Project did not reflect this higher toll since it considers typical days rather than days with unusually high traffic levels.

³ Motorcycles and commercial vans would pay the auto rate.

CENTRAL BUSINESS DISTRICT (CBD) TOLLING PROGRAM

Appendix 4A.2, Transportation: Travel Forecast Tolling Scenario Summaries and Detailed Tables (2023 and 2045)

2023

Contents

4A.2.1 Travel Forecast Tolling Scenario Summaries 4A.2-1

4A.2.1 TOLLING SCENARIO A (2023) 4A.2-1

4A.2.2 TOLLING SCENARIO B (2023)..... 4A.2-1

4A.2.3 TOLLING SCENARIO C (2023)..... 4A.2-3

4A.2.4 TOLLING SCENARIO D (2023) 4A.2-3

4A.2.5 TOLLING SCENARIO E (2023)..... 4A.2-3

4A.2.6 TOLLING SCENARIO F (2023)..... 4A.2-3

4A.2.7 TOLLING SCENARIO G (2023) 4A.2-4

4A.2.8 TOLLING SCENARIO A (2045) 4A.2-4

4A.2.9 TOLLING SCENARIO B (2045)..... 4A.2-4

4A.2.10 TOLLING SCENARIO C (2045)..... 4A.2-5

4A.2.11 TOLLING SCENARIO D (2045) 4A.2-5

4A.2.12 TOLLING SCENARIO E (2045)..... 4A.2-5

4A.2.13 TOLLING SCENARIO F (2045)..... 4A.2-5

4A.2.14 TOLLING SCENARIO G (2045) 4A.2-5

4A.2.2 Travel Forecast Detailed Tables 4A.2-6

Tables

Table 4A.2-1. Daily Vehicle-Miles Traveled: Tolling Scenario B and Tolling Scenario B with 30 Percent Higher Tolls (2023) 4A.2-2

Table 4A.2-2. Daily Vehicles Entering the Manhattan CBD by Crossing Location: No Action Alternative, Tolling Scenario B, and Tolling Scenario B with 30 Percent Higher Tolls (2023) 4A.2-2

Table 4A.2-3. Toll Vehicle Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2023) 4A.2-6

Table 4A.2-4. Summary – Vehicle-Miles Traveled (2023) 4A.2-9

Table 4A.2-5. Transit Boardings by Mode (2023) 4A.2-10

Table 4A.2-6. Cordon Volumes by Station/Route (2023) 4A.2-11

Table 4A.2-7. Change in Mode Share to the Manhattan CBD (2023) 4A.2-12

Table 4A.2-8. Taxi and FHV Toll Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2023)..... 4A.2-13

Table 4A.2-9. Truck Toll Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2023) 4A.2-14

Table 4A.2-10. Work Journeys to the Manhattan CBD by Origin County (2023)..... 4A.2-15

Table 4A.2-11. Toll Vehicle Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2045) 4A.2-16

Table 4A.2-12. Summary – Vehicle-Miles Traveled (2045) 4A.2-19

Table 4A.2-13. Transit Boardings by Mode (2045) 4A.2-20

Table 4A.2-14. Cordon Volumes by Station/Route (2045) 4A.2-21

Table 4A.2-15. Change in Mode Share to the Manhattan CBD (2045) 4A.2-22

Table 4A.2-16. Taxi and FHV Toll Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2045)..... 4A.2-23

Table 4A.2-17. Truck Toll Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2045) 4A.2-24

Table 4A.2-18. Work Journeys to the Manhattan CBD by Origin County (2045)..... 4A.2-25

Acronyms

CBD	Central Business District
EA	Environmental Assessment
FDR Drive	Franklin D. Roosevelt Drive
FHV	For-Hire Vehicle
MTA	Metropolitan Transportation Authority
NYCDOT	New York City Department of Transportation
NYMTC	New York Metropolitan Transportation Council
PANYNJ	Port Authority of New York and New Jersey
TBTA	Triborough Bridge and Tunnel Authority
VMT	Vehicle-Miles Traveled

4A.2.1 TRAVEL FORECAST TOLLING SCENARIO SUMMARIES

The following sections describe the opening year (2023) travel pattern changes for each tolling scenario followed by horizon year (2045) travel pattern changes for each tolling scenario compared to the No Action Alternative. While the results of the 2045 model runs are different in terms of actual numbers (because they reflect the longer-term background growth in the model’s forecast), the patterns from tolling scenario to tolling scenario are consistent between 2023 and 2045. For reference, **Chapter 2, “Project Alternatives,”** provides descriptions of each tolling scenario.

4A.2.1 Tolling Scenario A (2023)

All passenger and commercial vehicles (except those exempted by the enabling legislation) entering or remaining in the Manhattan CBD would pay the Manhattan CBD entry toll, which would vary by vehicle type, time of day, and payment method (e.g., E-ZPass, Tolls by Mail). There would be no crossing credits offered to reduce the Manhattan CBD toll. This tolling scenario would reduce vehicular demand to the Manhattan CBD and divert drivers who would have previously traveled through the Manhattan CBD between New Jersey and Brooklyn, Queens, and Long Island, to instead choose routes through Upper Manhattan, the Bronx, or Staten Island.

Under Tolling Scenario A, total vehicle-miles traveled (VMT) in the Manhattan CBD would be reduced by 7.8 percent compared to the No Action Alternative, with more modest reductions citywide and regionwide (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-7**). Transit mode share to the Manhattan CBD would grow by 1.1 percent, from 78.2 percent to 79.3 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-8**). Total vehicles entering the Manhattan CBD would also decline by 15.4 percent in this tolling scenario (see **Subchapter 4A, Table 4A-5**).

For Tolling Scenario A, traffic entering Manhattan via the Lincoln and Holland Tunnels would decrease, while traffic entering Manhattan on the George Washington Bridge would increase. The diversion to the George Washington Bridge would result from traffic attempting to avoid the Manhattan CBD when traveling between origins and destinations outside the Manhattan CBD. For example, in the No Action Alternative, an auto trip between Jersey City and the Upper West Side in Manhattan would likely use the Lincoln or Holland Tunnel because these facilities provide the most direct time-path, and no toll differential exists among the different Manhattan Hudson River crossings. With the introduction of Manhattan CBD tolling, drivers would pay the Manhattan CBD toll, in addition to the existing Port Authority of New York and New Jersey (PANYNJ) toll, for traveling through the Manhattan CBD. As a result, many of these trips would instead divert to the George Washington Bridge to avoid the Manhattan CBD toll despite the longer travel times.

For Tolling Scenario A, truck trips entering the Manhattan CBD would decline by 11.6 percent. Since this tolling scenario would toll trucks each time they enter or remain in the Manhattan CBD, trucks from New Jersey would be more likely to remain on West Side avenues in Manhattan to travel north and south rather than leave and re-enter the Manhattan CBD via the West Side Highway/Route 9A. This would result in additional truck traffic on these avenues near the Lincoln Tunnel.

4A.2.2 Tolling Scenario B (2023)

Tolling Scenario B differs from Tolling Scenario A in its treatment of potential tolling exemptions and caps for buses and commercial vehicles. For Tolling Scenario B, all buses (e.g., transit buses, charter buses) would be exempt from paying

the Manhattan CBD toll, taxis and FHV’s would be charged only once per day, and trucks would be charged up to two times a day. The Manhattan CBD toll for Tolling Scenario B would also be higher than for Tolling Scenario A.

Total VMT for Tolling Scenario B would be reduced by 7.6 percent in the Manhattan CBD compared to the No Action Alternative, with more modest reductions citywide and regionwide (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-7**). The transit mode share to the Manhattan CBD would grow from 78.2 percent to 79.2 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-8**). Total vehicles entering the Manhattan CBD would also decline by 15.7 percent in this tolling scenario (see **Subchapter 4A, Table 4A-5**).

Tolling Scenario B would not offer any crossing credits for vehicles entering Manhattan on TBTA and PANYNJ crossings. As a result, the diversion effects described for Tolling Scenario A would apply to Tolling Scenario B.

In Tolling Scenario B, the taxi and FHV toll would be charged only once per day per vehicle, and, as a result, the Manhattan CBD toll would likely be spread across multiple trips and passengers during the day. While the cost to access the Manhattan CBD would increase for taxis and FHV’s relative to the No Action Alternative, the increased cost per trip would be greater for private automobiles, which are less able to spread the cost across multiple trips and drivers. This could encourage some drivers to switch to taxis, FHV’s, or transit.¹

For Tolling Scenario B, truck trips entering the Manhattan CBD would decline by 12.3 percent. On average, commercial trucks enter the Manhattan CBD only 1.5 times per day.² Because most trucks enter the Manhattan CBD fewer than two times per day, capping toll payments at twice per day for truck would have a minimal impact on trucks entering the Manhattan CBD.

Tolling Scenario B with 30 Percent Higher Tolls (2023). Model results indicate that Tolling Scenario B would not generate sufficient revenue to meet the Project objective related to raising sufficient annual net revenues to fund \$15 billion for capital projects for the MTA Capital Program. It was retained in this analysis to provide consideration of a tolling scenario with lower toll rates and substantial caps and exemptions, which was a combination repeatedly requested by the public during development of this EA. To meet the revenue goal, an additional variation of the original Tolling Scenario B was modeled. In this variation, toll rates were increased 30 percent from the original Tolling Scenario B for all vehicle classes across all time periods. All other tolling policies in this variation are consistent with the original Tolling Scenario B.

This variation of Tolling Scenario B would reduce VMT in the Manhattan CBD by 8.6 percent compared to the No Action Alternative (**Table 4A.2-1**). This variation would also reduce traffic entering the Manhattan CBD by 17.5 percent (**Table 4A.2-2**). This variation would have minor changes to transit ridership where transit mode share to the Manhattan CBD would grow from 78.2 percent to 79.5 percent of the total journeys accessing the Manhattan CBD. This is a 0.3 percent greater transit mode share than the original Tolling Scenario B, and less than the transit mode share increases in Tolling Scenarios D, E, and F. For this variation of Tolling Scenario B, truck trips entering the Manhattan CBD would decline 13.8 percent.

¹ Taxis and FHV’s would potentially be exempt from the CBD toll, receive a toll discount, or be subject to some other toll reduction such as a cap.

² TBTA Entry Data from November 7, 2019, from the Hugh L. Carey Tunnel and Queens-Midtown Tunnel.

Table 4A.2-1. Daily Vehicle-Miles Traveled: Tolling Scenario B and Tolling Scenario B with 30 Percent Higher Tolls (2023)

LOCATIONS	NO ACTION	SCENARIO B	SCENARIO B (PERCENTAGE CHANGE)	SCENARIO B (WITH 30% HIGHER TOLLS)	SCENARIO B (WITH 30% HIGHER TOLLS) (PERCENTAGE CHANGE)
New York State	122,186,497	121,789,089	-0.3%	121,698,669	-0.4%
New York City	47,131,752	46,784,237	-0.7%	46,708,460	-0.9%
Manhattan CBD	3,244,791	2,998,489	-7.6%	2,965,910	-8.6%
CBD Core	1,217,727	1,152,471	-5.4%	1,143,029	-6.1%
Peripheral Highways (south of 60th Street; excluded from the toll)	2,027,064	1,846,018	-8.9%	1,822,881	-10.1%
West Side Highway/Route 9A	610,657	513,887	-15.8%	508,096	-16.8%
FDR Drive	720,682	729,706	1.3%	727,868	1.0%
Bridges & Tunnels	695,725	602,425	-13.4%	586,917	-15.6%
NYC Subarea 1 (see Figure 4A-2)	2,218,077	2,049,528	-7.6%	2,029,541	-8.5%
NYC Subarea 2 (see Figure 4A-2)	6,660,953	6,630,016	-0.5%	6,617,073	-0.7%
NYC Subarea 3 (see Figure 4A-2)	35,007,931	35,106,204	0.3%	35,095,936	0.3%
Long Island Counties (2)	41,585,545	41,595,736	0.0%	41,620,213	0.1%
New York Counties North of New York City (5)	33,469,200	33,409,116	-0.2%	33,369,996	-0.3%
New Jersey Counties (14)	97,578,100	97,590,826	0.0%	97,595,190	0.0%
Connecticut Counties (2)	34,909,870	34,856,848	-0.2%	34,873,079	-0.1%
TOTAL	254,674,467	254,236,763	-0.2%	254,166,938	-0.2%

Note: The number of counties is indicated within parentheses ().

Table 4A.2-2. Daily Vehicles Entering the Manhattan CBD by Crossing Location: No Action Alternative, Tolling Scenario B, and Tolling Scenario B with 30 Percent Higher Tolls (2023)

CROSSING LOCATION	NO ACTION	SCENARIO B	SCENARIO B (Percentage Change)	SCENARIO B (WITH 30% HIGHER TOLLS)	SCENARIO B (WITH 30% HIGHER TOLLS) (Percentage Change)
60th Street	276,466	221,318	-19.9%	217,484	-21.3%
FDR Drive and West Side Highway/Route 9A ¹	161,696	152,322	-5.8%	151,952	-6.0%
West Side Avenues	28,026	22,743	-18.9%	22,128	-21.0%
East Side Avenues	86,744	46,253	-46.7%	43,404	-50.0%
Queens	142,596	124,315	-12.8%	123,032	-13.7%
Brooklyn	187,486	167,624	-10.6%	164,160	-12.4%
New Jersey	109,602	90,704	-17.2%	86,219	-21.3%
TOTAL Entering	716,150	603,961	-15.7%	590,895	-17.5%

¹ Vehicle volumes entering the Manhattan CBD reported in this table for the Franklin D. Roosevelt (FDR) Drive and the West Side Highway/Route 9A are all vehicles traveling south on these facilities at 60th Street regardless of whether the vehicle eventually enters the Manhattan CBD from one of these facilities. Some vehicles reported in this table may use the West Side Highway/Route 9A and the FDR Drive to access the Hugh L. Carey Tunnel or Brooklyn Bridge without ever entering the Manhattan CBD. The volumes here are reported in this manner to be consistent with counts published in the annual New York Metropolitan Transportation Council (NYMTC) *Hub Bound Travel Data Report*.

4A.2.3 Tolling Scenario C (2023)

Tolling Scenario C differs from Tolling Scenario A in several ways:

- Tolling Scenario C would have a higher Manhattan CBD toll (approximately 50 percent greater than Tolling Scenario A).
- Tolling Scenario C would provide a crossing credit for vehicles that paid tolls on the Queens-Midtown Tunnel, Hugh L. Carey Tunnel, Lincoln Tunnel, and Holland Tunnel.
- Tolling Scenario C would provide an exemption for taxis and a three-time daily cap for FHVs.

Tolling Scenario C would have higher toll rates compared to Tolling Scenarios A and B. These increased tolls would offset the cost of providing crossing credits to Manhattan CBD tunnel customers. This tolling scenario would result in a larger reduction in VMT in the Manhattan CBD compared to Tolling Scenarios A and B, with an 8.0 percent decrease in Manhattan CBD VMT compared to the No Action Alternative (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-7**). Transit mode share to the Manhattan CBD would grow from 78.2 percent to 79.6 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-8**). Total vehicles entering the Manhattan CBD would decline by 17.3 percent for Tolling Scenario C (see **Subchapter 4A, Table 4A-5**). In Tolling Scenario C, truck trips entering the Manhattan CBD would decline by 14.1 percent.

Potential crossing credits for Tolling Scenario C would reduce cost differences between NYCDOT and TBTA East River crossings entering the Manhattan CBD. In this tolling scenario, for example, a driver entering the Manhattan CBD during the day would pay the same combined toll with crossing credits entering on any East River crossing. As a result, the proportion of East River crossings via the Queens-Midtown Tunnel and Hugh L. Carey Tunnel would increase from 11 percent in the No Action Alternative to 17 percent for Tolling Scenario C. Even with the increased proportion of drive trips using these facilities to enter the Manhattan CBD, total drive journeys entering the Manhattan CBD would decline for Tolling Scenario C.

4A.2.4 Tolling Scenario D (2023)

Tolling Scenario D would offer Manhattan CBD crossing credits for vehicle trips using the Queens-Midtown Tunnel, Hugh L. Carey Tunnel, Holland Tunnel, or Lincoln Tunnel that would be higher than those offered for Tolling Scenario C. The higher crossing credits offered in this tolling scenario would result in a higher Manhattan CBD toll rate than Tolling Scenario C. Similar to Tolling Scenario A, taxis, FHVs, and commercial vehicles would be assessed a toll each time they enter or remain in the Manhattan CBD.

Tolling Scenario D would reduce VMT in the Manhattan CBD by 8.7 percent compared to the No Action Alternative (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-7**). This tolling scenario would result in greater VMT reductions than Tolling Scenarios A, B, and C in New York City Subarea 1. Because higher crossing credits would require higher tolls to meet the Project’s net revenue goal, traffic would be reduced in areas of Upper Manhattan and Downtown Brooklyn nearest the crossings where no crossing credits would apply. In these areas, the TBTA crossing credits included for Tolling Scenario D would also reduce VMT due to driver diversions from untolled river crossings to more direct, tolled river crossings. Transit mode share to the Manhattan CBD would grow from 78.2 percent to 80.3 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-8**). Total vehicles entering the Manhattan CBD would decline by 18.7 percent for Tolling Scenario D (see **Subchapter 4A, Table 4A-5**). In Tolling Scenario D, truck trips entering the Manhattan CBD would decline by 14.4 percent.

Recognizing that the tolls on the tunnels entering the Manhattan CBD would be higher than the crossing credit provided for Tolling Scenario C, Tolling Scenario D would provide a higher crossing credit against the Manhattan CBD toll that is closer to what PANYNJ customers, or TBTA customers traveling in both directions, would pay at the tunnels. This would increase the share of East River traffic on TBTA facilities connecting to the Manhattan CBD to 22 percent, from 11 percent in the No Action Alternative.

For the Hudson River crossings, volumes on the George Washington Bridge to Manhattan would decline. Some drivers bound to the Manhattan CBD from west of the Hudson River would divert to the Lincoln Tunnel and Holland Tunnel seeking crossing credits. These Manhattan CBD-bound driver diversions would be greater than the number of drivers switching to the bridge to avoid the Manhattan CBD toll for trips through the Manhattan CBD. This would lead to a net decline on Manhattan-bound vehicles on the George Washington Bridge.

4A.2.5 Tolling Scenario E (2023)

For Tolling Scenario E, increased tolls are the primary difference from Tolling Scenario D. Tolling Scenario E would exempt transit buses from paying the Manhattan CBD toll, which would result in a higher toll rate for other vehicle classes to maintain net revenue goals for the program. Tolling Scenario E along with Tolling Scenario F would have the highest tolls of any tolling scenario—approximately 20 percent higher than Tolling Scenario D and 150 percent higher than Tolling Scenario A. Tolling Scenario E would offer the same crossing credits as Tolling Scenario D on all tolled crossings into the Manhattan CBD.

Tolling Scenario E would reduce Manhattan CBD VMT by 9.2 percent compared to the No Action Alternative (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-7**). This tolling scenario would have the highest toll rates (along with Tolling Scenario F), which is the most significant factor in reducing VMT within the Manhattan CBD. Transit mode share to the Manhattan CBD would grow from 78.2 percent to 80.5 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-8**). Total vehicles entering the Manhattan CBD would also decline by 19.9 percent in this tolling scenario (see **Subchapter 4A, Table 4A-5**). In Tolling Scenario E, truck trips entering the Manhattan CBD would decline by 17.1 percent.

The crossing credit impacts on diversions would be largely the same for Tolling Scenario E compared to Tolling Scenario D. The higher crossing credit for Tolling Scenario E would reduce the share of Hudson River traffic heading to Manhattan on the George Washington Bridge compared to the lower crossing credit for Tolling Scenario C. However, higher tolls would increase Hudson River diversions from the Lincoln and Holland Tunnels to the George Washington Bridge compared to Tolling Scenario D. In summary, traffic into Manhattan for Tolling Scenario E would decrease 1 percent compared to the No Action Alternative.

4A.2.6 Tolling Scenario F (2023)

Tolling Scenario F differs from the other tolling scenarios in its approach to tolling crossing credits and time periods for tolling. Tolling Scenario F would offer the same higher crossing credit as Tolling Scenarios D and E, but the crossing credit would apply to all tolled crossings into Manhattan. As a result, the crossing credit would also be available to drivers using the George Washington Bridge, Henry Hudson Bridge, and the Robert F. Kennedy Bridge to reach the Manhattan CBD. This tolling scenario would also reduce the amount of time the peak-period toll would be charged from 14 hours to 8 hours (4 hours in the AM peak and 4 hours in the PM peak) compared to the other tolling scenarios.

Tolling Scenario F would reduce VMT in the Manhattan CBD by 7.1 percent compared to the No Action Alternative (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-7**). Transit mode share to the Manhattan CBD would grow from 78.2 percent to 80.0 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-8**). Total vehicles entering the Manhattan CBD would decline by 18.3 percent in this tolling scenario (see **Subchapter 4A, Table 4A-5**). In Tolling Scenario F, truck trips entering the Manhattan CBD would decline by 20.2 percent.

In Tolling Scenario F (along with Tolling Scenario B), the taxi and FHV toll would be charged only once per day per vehicle and, as a result, likely would be spread across multiple trips and passengers. While the cost to access the Manhattan CBD would increase for taxis and FHV, it would increase more for private automobiles on a per trip rate. A low taxi and FHV toll spread across multiple trips plus improved travel times could encourage some drivers to switch to taxis and FHV as well as transit.

4A.2.7 Tolling Scenario G (2023)

The Project Sponsors added Tolling Scenario G to this Environmental Assessment in response to concerns raised during early public outreach for the Project. This tolling scenario differs from all other tolling scenarios in that tolls would be the same for all vehicle classes. Like other tolling scenarios, tolls would vary by time period. No crossing credits would be offered in Tolling Scenario G, and by most metrics the tolling scenario would have similar effects to Tolling Scenarios A and B. One noticeable effect of Tolling Scenario G would be a significant reduction in truck diversions because through-trucks would be more likely to traverse the Manhattan CBD when the truck toll is equal to all other vehicle classes. As a result of equalizing tolls for trucks, the peak and off-peak E-ZPass rates would be 26 percent higher than Tolling Scenario A, and overnight tolls would be 60 percent of peak rates instead of 50 percent under Tolling Scenario A. Similar to Tolling Scenario A, taxis, FHV, and trucks would be charged for each entry.

Tolling Scenario G would reduce VMT in the Manhattan CBD by 8.4 percent compared to the No Action Alternative (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-7**). Transit mode share to the Manhattan CBD would grow from 78.2 percent to 79.6 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-8**). Total vehicles entering the Manhattan CBD would decline by 17.1 percent in this tolling scenario (see **Subchapter 4A, Table 4A-5**). In Tolling Scenario G, truck trips entering the Manhattan CBD would decline by 7.4 percent, compared to a decline of 11.6 percent in Tolling Scenario A and greater declines in other tolling scenarios.

During early public outreach for the Project, truck diversions were raised as a concern. Tolling Scenario G would decrease the level of truck diversions around the Manhattan CBD, as indicated by volumes on key bridges in the region. Tolling Scenario G would have a 0.5 percent decrease in daily truck volumes on the George Washington Bridge compared to the No Action Alternative, whereas every other tolling scenario would have an increase of 1 percent to 3 percent. On the Throgs Neck Bridge, Tolling Scenario G would have a 0.8 percent increase in daily truck volumes compared to the No Action Alternative, but this would be well below the 4 percent to 6 percent increases seen in other tolling scenarios. On the Verrazzano-Narrows Bridge, Tolling Scenario G would have a 0.8 percent increase in daily truck volumes compared to the No Action Alternative; other tolling scenarios would have increases of 2 percent to 6 percent. Within the Manhattan CBD, truck traffic would still decrease, but not as substantially as with other tolling scenarios.

Tolling Scenario G with Taxis/FHVs Capped at Once Per Day (2023). A variation of Tolling Scenario G was run to test the impact of adding a one-charge-per-day cap to taxis and FHV. Adding this cap required increasing tolls on other vehicles

by about 10 percent to meet the Project’s revenue goal. This toll increase was low enough so as not to notably affect the results from Tolling Scenario G.

This Tolling Scenario G variation would reduce VMT in the Manhattan CBD by 8.2 percent compared to the No Action Alternative; the original Tolling Scenario G would reduce VMT by 8.4 percent. This variation would also reduce traffic entering the Manhattan CBD by 16.9 percent; the original Tolling Scenario G would reduce traffic entering the Manhattan CBD by 17.1 percent. This variation would have minor changes to transit ridership where transit mode share to the Manhattan CBD would grow from 78.2 percent to 79.2 percent of the total journeys accessing the Manhattan CBD; the transit mode share in the original Tolling Scenario G would be 79.4 percent.

In this variation of Tolling Scenario G, truck trips entering the Manhattan CBD would decline by 8.1 percent, compared to a decline of 7.4 percent in Tolling Scenario G. On key diversions bridges, this variation of Tolling Scenario G would perform as follows:

- a 0.2 percent decrease in daily truck volumes on the George Washington Bridge, versus a 0.5 percent decrease in Tolling Scenario G
- a 1.4 percent increase in daily truck volumes on the Throgs Neck Bridge, versus a 0.8 percent increase in Tolling Scenario G
- a 0.5 percent increase in daily truck volumes on the Verrazzano-Narrows Bridge, versus a 0.8 percent increase in Tolling Scenario G

4A.2.8 Tolling Scenario A (2045)

For Tolling Scenario A, total VMT in the Manhattan CBD would be reduced by 6.7 percent compared to the No Action Alternative, with more modest reductions citywide and regionwide (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-14**). Transit mode share to the Manhattan CBD would grow by 1.1 percent, from 79.7 percent to 80.8 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-15**). Total vehicles entering the Manhattan CBD would also decline by 13.7 percent in this tolling scenario (see **Subchapter 4A, Table 4A-12**).

For Tolling Scenario A, truck trips entering the Manhattan CBD would decline by 11.9 percent. Because this tolling scenario tolls trucks each time they enter or remain in the Manhattan CBD, trucks from New Jersey would be more likely to remain on West Side avenues in Manhattan to travel north and south rather than leave and re-enter the Manhattan CBD via the West Side Highway/Route 9A. This would result in additional truck traffic on these avenues near the Lincoln Tunnel.

4A.2.9 Tolling Scenario B (2045)

Total VMT for Tolling Scenario B would be reduced by 6.0 percent in the Manhattan CBD compared to the No Action Alternative, with more modest reductions citywide and regionwide (see **Subchapter 4A, “Transportation: Regional Transportation Effects and Modeling,” Table 4A-14**). The transit mode share to the Manhattan CBD would grow from 79.7 percent to 80.5 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-15**). Total vehicles entering the Manhattan CBD would also decline by 13.3 percent for this tolling scenario (see **Subchapter 4A, Table 4A-12**).

In Tolling Scenario B, the taxi and FHV toll would be charged only once per day per vehicle, and, as a result, the Manhattan CBD toll would likely be spread across multiple trips and passengers during the day. While the cost to access the Manhattan CBD would increase for taxis and FHV's relative to the No Action Alternative, the increased cost per trip would be greater for private automobiles, which are less able to spread the cost across multiple trips and drivers. This could encourage some drivers to switch to taxis, FHV's, and transit.

For Tolling Scenario B, truck trips entering the Manhattan CBD would decline by 12.5 percent. On average, commercial trucks enter the Manhattan CBD only 1.5 times per day.³ Therefore, capping Manhattan CBD toll payments for trucks at twice per day would have minimal effect on truck-trip behavior compared to Tolling Scenario A, which would have no daily toll cap on trucks.

4A.2.10 Tolling Scenario C (2045)

Tolling Scenario C would have higher toll rates compared to Tolling Scenarios A and B. These increased tolls would offset the cost of providing crossing credits to Manhattan CBD tunnel customers. This tolling scenario would result in more reductions in VMT in the Manhattan CBD as Tolling Scenarios A and B, with a 7.2 percent decrease in Manhattan CBD VMT compared to the No Action Alternative (see **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling," Table 4A-14**). Transit mode share to the Manhattan CBD would grow from 79.7 percent to 81 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-15**). Total vehicles entering the Manhattan CBD would decline by 15.3 percent for Tolling Scenario C (see **Subchapter 4A, Table 4A-12**). In Tolling Scenario C, truck trips entering the Manhattan CBD would decline by 13.2 percent.

4A.2.11 Tolling Scenario D (2045)

Tolling Scenario D would reduce VMT in the Manhattan CBD by 8.4 percent compared to the No Action Alternative (see **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling," Table 4A-14**). This tolling scenario would result in greater VMT reductions than Tolling Scenarios A, B, and C in New York City Subarea 1. Because higher crossing credits would require higher tolls to maintain net revenue goals, traffic would be reduced in areas of Upper Manhattan and Downtown Brooklyn nearest the crossings where no crossing credits would apply. In these areas, the TBTA crossing credits included in Tolling Scenario D would also reduce VMT because of driver diversions from untolled river crossings to more direct, tolled river crossings. Transit mode share to the Manhattan CBD would grow from 79.7 percent to 81.7 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-15**). Total vehicles entering the Manhattan CBD would decline by 17.7 percent for Tolling Scenario D (see **Subchapter 4A, Table 4A-12**). In Tolling Scenario D, truck trips entering the Manhattan CBD would decline by 14.4 percent.

4A.2.12 Tolling Scenario E (2045)

Tolling Scenario E would reduce Manhattan CBD VMT by 8.7 percent compared to the No Action Alternative (see **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling," Table 4A-14**). Transit mode share to the Manhattan CBD would grow from 79.7 percent to 81.9 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-15**). Total vehicles entering the Manhattan CBD would also decline by 18.7 percent for this tolling scenario (see **Subchapter 4A, Table 4A-12**). In Tolling Scenario E, truck trips entering the Manhattan CBD would decline by 16.6 percent.

4A.2.13 Tolling Scenario F (2045)

Tolling Scenario F would reduce VMT in the Manhattan CBD by 7.5 percent compared to the No Action Alternative (see **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling," Table 4A-14**). Transit mode share to the Manhattan CBD would grow from 79.7 percent to 81.5 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-15**). Total vehicles entering the Manhattan CBD would decline by 17.2 percent for this tolling scenario (see **Subchapter 4A, Table 4A-12**). In Tolling Scenario F, truck trips entering the Manhattan CBD would decline by 16.5 percent.

4A.2.14 Tolling Scenario G (2045)

Tolling Scenario G would reduce VMT in the Manhattan CBD by 7.6 percent compared to the No Action Alternative (see **Subchapter 4A, "Transportation: Regional Transportation Effects and Modeling," Table 4A-14**). Transit mode share to the Manhattan CBD would grow from 79.7 percent to 81.0 percent of the total journeys accessing the Manhattan CBD (see **Subchapter 4A, Table 4A-15**). Total vehicles entering the Manhattan CBD would decline by 15.3 percent (see **Subchapter 4A, Table 4A-12**), and truck trips entering the Manhattan CBD would decline by 6.1 percent.

³ TBTA Entry Data from November 7, 2019, from the Hugh L. Carey Tunnel and Queens-Midtown Tunnel.

4A.2.2 TRAVEL FORECAST DETAILED TABLES

Table 4A.2-3. Toll Vehicle Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2023)

Daily Volumes									Percent Change						
		Scenario							Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
(by Screen Line/ Crossing)															
Total	1,414,585	1,213,964	1,209,856	1,186,011	1,165,190	1,148,053	1,171,689	1,190,707	-14%	-14%	-16%	-18%	-19%	-17%	-16%
Inbound	716,150	605,913	590,895	592,015	581,926	573,295	585,168	594,002	-15%	-17%	-17%	-19%	-20%	-18.3%	-17.1%
Outbound	698,410	608,023	593,230	593,964	583,232	574,733	586,493	596,676	-13%	-15%	-15%	-16%	-18%	-16%	-15%
60th Street	530,784	448,516	449,884	432,313	415,589	411,849	425,651	441,908	-15.5%	-15.2%	-18.6%	-21.7%	-22.4%	-19.8%	-16.7%
Inbound	276,466	220,659	217,484	208,405	198,437	196,294	204,011	216,999	-20.2%	-21.3%	-24.6%	-28.2%	-29.0%	-26.2%	-21.5%
Outbound	254,307	227,843	225,799	223,892	217,136	215,545	221,627	224,896	-10.4%	-11.2%	-12.0%	-14.6%	-15.2%	-12.9%	-11.6%
FDR DRIVE+WEST SIDE HWY	291,185	276,569	277,869	273,016	265,672	263,647	270,783	274,822	-5.0%	-4.6%	-6.2%	-8.8%	-9.5%	-7.0%	-5.6%
West Side Highway / Route 9A	122,140	112,694	113,191	110,074	106,877	105,727	108,784	111,538	-7.7%	-7.3%	-9.9%	-12.5%	-13.4%	-10.9%	-8.7%
am	25,702	25,071	24,997	24,489	23,993	23,769	24,316	24,818	-2.5%	-2.7%	-4.7%	-6.6%	-7.5%	-5.4%	-3.4%
md	35,198	32,221	32,826	32,176	30,600	30,831	31,532	32,176	-8.5%	-6.7%	-8.6%	-13.1%	-12.4%	-10.4%	-8.6%
pm	26,248	25,281	25,353	24,786	24,381	24,288	24,750	25,098	-3.7%	-3.4%	-5.6%	-7.1%	-7.5%	-5.7%	-4.4%
nt	34,992	30,121	30,015	28,623	27,903	26,839	28,186	29,446	-13.9%	-14.2%	-18.2%	-20.3%	-23.3%	-19.5%	-15.8%
FDR Drive	169,045	163,875	164,678	162,942	158,795	157,920	161,999	163,284	-3.1%	-2.6%	-3.6%	-6.1%	-6.6%	-4.2%	-3.4%
am	34,583	34,087	34,140	34,092	33,858	33,882	34,483	34,020	-1.4%	-1.3%	-1.4%	-2.1%	-2.0%	-0.3%	-1.6%
md	47,506	45,244	46,147	46,139	45,226	45,310	46,489	45,180	-4.8%	-2.9%	-2.9%	-4.8%	-4.6%	-2.1%	-4.9%
pm	40,079	39,049	39,133	38,753	37,976	38,038	38,679	38,916	-2.6%	-2.4%	-3.3%	-5.2%	-5.1%	-3.5%	-2.9%
nt	46,877	45,495	45,258	43,958	41,735	40,690	42,348	45,168	-2.9%	-3.5%	-6.2%	-11.0%	-13.2%	-9.7%	-3.6%
WEST AVENUES	68,392	52,383	53,572	50,586	47,820	47,219	49,818	51,662	-23.4%	-21.7%	-26.0%	-30.1%	-31.0%	-27.2%	-24.5%
West End Ave	9,898	3,684	3,763	2,894	2,325	2,136	2,721	3,747	-62.8%	-62.0%	-70.8%	-76.5%	-78.4%	-72.5%	-62.1%
am	2,312	925	932	681	574	486	629	963	-60.0%	-59.7%	-70.5%	-75.2%	-79.0%	-72.8%	-58.3%
md	2,706	1,124	1,164	843	674	607	826	1,193	-58.5%	-57.0%	-68.8%	-75.1%	-77.6%	-69.5%	-55.9%
pm	2,930	1,090	1,151	1,001	733	744	898	1,084	-62.8%	-60.7%	-65.8%	-75.0%	-74.6%	-69.4%	-63.0%
nt	1,950	545	516	369	344	299	368	507	-72.1%	-73.5%	-81.1%	-82.4%	-84.7%	-81.1%	-74.0%
Broadway	33,773	28,170	28,585	27,511	25,951	25,477	26,726	27,285	-16.6%	-15.4%	-18.5%	-23.2%	-24.6%	-20.9%	-19.2%
am	7,916	6,807	6,792	6,480	6,053	5,825	6,349	6,542	-14.0%	-14.2%	-18.1%	-23.5%	-26.4%	-19.8%	-17.4%
md	9,108	7,000	7,239	6,826	6,094	6,065	6,520	6,773	-23.1%	-20.5%	-25.1%	-33.1%	-33.4%	-28.4%	-25.6%
pm	10,673	9,138	9,398	8,991	8,694	8,557	8,694	8,965	-14.4%	-11.9%	-15.8%	-18.5%	-19.8%	-18.5%	-16.0%
nt	6,076	5,225	5,156	5,214	5,110	5,030	5,163	5,005	-14.0%	-15.1%	-14.2%	-15.9%	-17.2%	-15.0%	-17.6%
Amsterdam	12,033	7,318	7,711	7,099	6,696	6,671	7,265	7,388	-39.2%	-35.9%	-41.0%	-44.4%	-44.6%	-39.6%	-38.6%
am	1,684	1,036	1,020	897	955	897	922	1,133	-38.5%	-39.4%	-46.7%	-43.3%	-46.7%	-45.2%	-32.7%
md	3,278	1,822	1,845	1,684	1,693	1,748	1,950	1,891	-44.4%	-43.7%	-48.6%	-48.4%	-46.7%	-40.5%	-42.3%
pm	5,264	3,502	3,862	3,352	2,815	2,992	3,155	3,349	-33.5%	-26.6%	-36.3%	-46.5%	-43.2%	-40.1%	-36.4%
nt	1,807	958	984	1,166	1,233	1,034	1,238	1,015	-47.0%	-45.5%	-35.5%	-31.8%	-42.8%	-31.5%	-43.8%
Columbus Ave	8,945	9,615	9,955	9,318	9,112	9,237	9,233	9,751	7.5%	11.3%	4.2%	1.9%	3.3%	3.2%	9.0%
am	2,651	2,663	2,790	2,598	2,566	2,609	2,629	2,753	0.5%	5.2%	-2.0%	-3.2%	-1.6%	-0.8%	3.8%
md	3,170	3,188	3,483	3,192	3,155	3,162	3,092	3,254	0.6%	9.9%	0.7%	-0.5%	-0.3%	-2.5%	2.6%
pm	1,801	1,781	1,837	1,749	1,715	1,755	1,778	1,772	-1.1%	2.0%	-2.9%	-4.8%	-2.6%	-1.3%	-1.6%
nt	1,323	1,983	1,845	1,779	1,676	1,711	1,734	1,972	49.9%	39.5%	34.5%	26.7%	29.3%	31.1%	49.1%
Eighth Avenue	3,743	3,596	3,558	3,764	3,736	3,698	3,873	3,491	-3.9%	-4.9%	0.6%	-0.2%	-1.2%	3.5%	-6.7%
am	643	698	664	770	932	871	921	633	8.6%	3.3%	19.8%	44.9%	35.5%	43.2%	-1.6%
md	1,011	880	910	896	854	867	864	832	-13.0%	-10.0%	-11.4%	-15.5%	-14.2%	-14.5%	-17.7%
pm	1,253	1,182	1,166	1,212	1,159	1,182	1,240	1,198	-5.7%	-6.9%	-3.3%	-7.5%	-5.7%	-1.0%	-4.4%
nt	836	836	818	886	791	778	848	828	0.0%	-2.2%	6.0%	-5.4%	-6.9%	1.4%	-1.0%
EAST AVENUES	171,207	119,564	118,443	108,711	102,097	100,983	105,050	115,424	-30.2%	-30.8%	-36.5%	-40.4%	-41.0%	-38.6%	-32.6%
Fifth Avenue	12,394	9,575	9,598	9,055	8,318	8,258	8,660	9,327	-22.7%	-22.6%	-26.9%	-32.9%	-33.4%	-30.1%	-24.7%
am	3,768	3,168	3,166	2,981	2,738	2,691	2,945	3,068	-15.9%	-16.0%	-20.9%	-27.3%	-28.6%	-21.8%	-18.6%
md	4,709	3,392	3,497	3,222	2,939	2,927	3,073	3,330	-28.0%	-25.7%	-31.6%	-37.6%	-37.8%	-34.7%	-29.3%
pm	2,150	1,606	1,634	1,582	1,465	1,493	1,530	1,614	-25.3%	-24.0%	-26.4%	-31.9%	-30.6%	-28.8%	-24.9%
nt	1,767	1,409	1,301	1,270	1,176	1,147	1,112	1,315	-20.3%	-26.4%	-28.1%	-33.4%	-35.1%	-37.1%	-25.6%

Appendix 4A.2, Transportation: Travel Forecast Tolling Scenario Summaries and Detailed Tables (2023 and 2045)

Daily Volumes									Percent Change						
Scenario (by Screen Line/ Crossing)	Scenario								Scenario						
	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
Total	1,414,585	1,213,964	1,209,856	1,186,011	1,165,190	1,148,053	1,171,689	1,190,707	-14%	-14%	-16%	-18%	-19%	-17%	-16%
Inbound	716,150	605,913	590,895	592,015	581,926	573,295	585,168	594,002	-15%	-17%	-17%	-19%	-20%	-18.3%	-17.1%
Outbound	698,410	608,023	593,230	593,964	583,232	574,733	586,493	596,676	-13%	-15%	-15%	-16%	-18%	-16%	-15%
Madison Avenue	3,727	3,171	3,231	3,118	2,959	2,878	2,926	3,140	-14.9%	-13.3%	-16.3%	-20.6%	-22.8%	-21.5%	-15.7%
am	462	433	432	424	428	430	437	420	-6.3%	-6.5%	-8.2%	-7.4%	-6.9%	-5.4%	-9.1%
md	936	867	883	855	857	859	856	829	-7.4%	-5.7%	-8.7%	-8.4%	-8.2%	-8.5%	-11.4%
pm	2,091	1,679	1,716	1,653	1,481	1,414	1,431	1,694	-19.7%	-17.9%	-20.9%	-29.2%	-32.4%	-31.6%	-19.0%
nt	238	192	200	186	193	175	202	197	-19.3%	-16.0%	-21.8%	-18.9%	-26.5%	-15.1%	-17.2%
Park Avenue	18,411	14,583	14,538	14,191	12,968	12,668	13,336	13,959	-20.8%	-21.0%	-22.9%	-29.6%	-31.2%	-27.6%	-24.2%
am	4,828	3,901	3,905	3,799	3,558	3,353	3,652	3,772	-19.2%	-19.1%	-21.3%	-26.3%	-30.6%	-24.4%	-21.9%
md	4,860	3,590	3,676	3,420	3,176	3,012	3,205	3,533	-26.1%	-24.4%	-29.6%	-34.7%	-38.0%	-34.1%	-27.3%
pm	5,188	4,242	4,302	4,177	3,884	3,860	4,003	4,009	-18.2%	-17.1%	-19.5%	-25.1%	-25.6%	-22.8%	-22.7%
nt	3,535	2,850	2,655	2,795	2,350	2,443	2,476	2,645	-19.4%	-24.9%	-20.9%	-33.5%	-30.9%	-30.0%	-25.2%
Lexington Avenue	14,798	10,597	10,671	9,140	7,982	7,718	8,448	10,751	-28.4%	-27.9%	-38.2%	-46.1%	-47.8%	-42.9%	-27.3%
am	3,677	2,293	2,329	2,135	1,879	1,863	1,978	2,323	-37.6%	-36.7%	-41.9%	-48.9%	-49.3%	-46.2%	-36.8%
md	6,294	4,900	4,820	3,817	3,177	3,029	3,415	4,983	-22.1%	-23.4%	-39.4%	-49.5%	-51.9%	-45.7%	-20.8%
pm	2,134	1,432	1,462	1,474	1,363	1,414	1,449	1,481	-32.9%	-31.5%	-30.9%	-36.1%	-33.7%	-32.1%	-30.6%
nt	2,693	1,972	2,060	1,714	1,563	1,412	1,606	1,964	-26.8%	-23.5%	-36.4%	-42.0%	-47.6%	-40.4%	-27.1%
Third Avenue	14,212	10,537	10,490	9,783	8,558	8,341	8,795	10,054	-25.9%	-26.2%	-31.2%	-39.8%	-41.3%	-38.1%	-29.3%
am	2,388	1,990	1,826	1,834	1,676	1,553	1,659	1,859	-16.7%	-23.5%	-23.2%	-29.8%	-35.0%	-30.5%	-22.2%
md	5,207	3,833	3,842	3,554	2,811	2,795	2,920	3,599	-26.4%	-26.2%	-31.7%	-46.0%	-46.3%	-43.9%	-30.9%
pm	4,658	3,304	3,352	3,005	2,747	2,702	2,905	3,149	-29.1%	-28.0%	-35.5%	-41.0%	-42.0%	-37.6%	-32.4%
nt	1,959	1,410	1,470	1,390	1,324	1,291	1,311	1,447	-28.0%	-25.0%	-29.0%	-32.4%	-34.1%	-33.1%	-26.1%
Second Avenue	39,264	17,362	16,626	14,152	13,485	13,301	14,184	15,297	-55.8%	-57.7%	-64.0%	-65.7%	-66.1%	-63.9%	-61.0%
am	8,739	5,211	5,052	4,696	5,206	5,032	5,261	4,719	-40.4%	-42.2%	-46.3%	-40.4%	-42.4%	-39.8%	-46.0%
md	11,336	5,009	4,687	3,681	3,266	3,394	3,674	4,618	-55.8%	-58.7%	-67.5%	-71.2%	-70.1%	-67.6%	-59.3%
pm	8,793	3,753	3,710	3,362	3,274	3,143	3,337	3,437	-57.3%	-57.8%	-61.8%	-62.8%	-64.3%	-62.0%	-60.9%
nt	10,396	3,389	3,177	2,413	1,739	1,732	1,912	2,523	-67.4%	-69.4%	-76.8%	-83.3%	-83.3%	-81.6%	-75.7%
First Avenue	5,642	5,019	5,272	4,967	5,276	5,111	5,418	5,193	-11.0%	-6.6%	-12.0%	-6.5%	-9.4%	-4.0%	-8.0%
am	1,709	1,527	1,557	1,499	1,943	1,770	2,000	1,549	-10.6%	-8.9%	-12.3%	13.7%	3.6%	17.0%	-9.4%
md	1,319	1,416	1,407	1,341	1,226	1,226	1,358	1,432	7.4%	6.7%	1.7%	-7.1%	-7.1%	3.0%	8.6%
pm	1,724	1,436	1,670	1,547	1,585	1,387	1,443	1,546	-16.7%	-3.1%	-10.3%	-8.1%	-19.5%	-16.3%	-10.3%
nt	890	640	638	580	522	728	617	666	-28.1%	-28.3%	-34.8%	-41.3%	-18.2%	-30.7%	-25.2%
York Avenue	23,046	13,733	13,591	12,481	11,842	11,793	12,225	13,239	-40.4%	-41.0%	-45.8%	-48.6%	-48.8%	-47.0%	-42.6%
am	4,385	2,576	2,545	2,363	2,226	2,188	2,248	2,482	-41.3%	-42.0%	-46.1%	-49.2%	-50.1%	-48.7%	-43.4%
md	6,974	4,392	4,584	3,964	3,652	3,690	3,922	4,236	-37.0%	-34.3%	-43.2%	-47.6%	-47.1%	-43.8%	-39.3%
pm	4,325	2,728	2,446	2,267	2,030	2,153	2,048	2,669	-36.9%	-43.4%	-47.6%	-53.1%	-50.2%	-52.6%	-38.3%
nt	7,362	4,037	4,016	3,887	3,934	3,762	4,007	3,852	-45.2%	-45.4%	-47.2%	-46.6%	-48.9%	-45.6%	-47.7%
Ed Koch Queensboro Ramp	39,713	34,987	34,426	31,824	30,709	30,915	31,058	34,464	-11.9%	-13.3%	-19.9%	-22.7%	-22.2%	-21.8%	-13.2%
am	7,646	5,244	5,284	5,092	5,084	5,235	5,223	5,196	-31.4%	-30.9%	-33.4%	-33.5%	-31.5%	-31.7%	-32.0%
md	15,217	12,289	11,930	10,586	9,709	9,733	9,910	11,908	-19.2%	-21.6%	-30.4%	-36.2%	-36.0%	-34.9%	-21.7%
pm	7,954	5,429	5,402	4,908	4,911	4,748	4,928	5,368	-31.7%	-32.1%	-38.3%	-38.3%	-40.3%	-38.0%	-32.5%
nt	8,896	12,025	11,810	11,238	11,005	11,199	10,997	11,992	35.2%	32.8%	26.3%	23.7%	25.9%	23.6%	34.8%
Queens	268,300	226,698	225,076	226,946	237,025	235,706	238,171	222,545	-15.5%	-16.1%	-15.4%	-11.7%	-12.1%	-11.2%	-17.1%
Inbound	142,596	125,030	123,032	130,029	136,799	136,652	137,229	123,298	-12.3%	-13.7%	-8.8%	-4.1%	-4.2%	-3.8%	-13.5%
Outbound	125,702	101,665	98,264	96,913	100,223	99,051	100,940	99,242	-19.1%	-21.8%	-22.9%	-20.3%	-21.2%	-19.7%	-21.0%
Ed Koch Queensboro Bridge	186,973	152,370	150,390	130,569	113,066	112,169	113,833	148,715	-18.5%	-19.6%	-30.2%	-39.5%	-40.0%	-39.1%	-20.5%
am	38,293	32,207	31,839	28,658	26,733	26,384	26,670	31,281	-15.9%	-16.9%	-25.2%	-30.2%	-31.1%	-30.4%	-18.3%
md	58,127	47,256	46,789	42,846	37,359	37,496	37,849	46,252	-18.7%	-19.5%	-26.3%	-35.7%	-35.5%	-34.9%	-20.4%
pm	40,997	32,279	31,961	27,824	25,524	24,984	25,738	31,564	-21.3%	-22.0%	-32.1%	-37.7%	-39.1%	-37.2%	-23.0%
nt	49,556	40,628	39,801	31,241	23,450	23,305	23,576	39,618	-18.0%	-19.7%	-37.0%	-52.7%	-53.0%	-52.4%	-20.1%

Appendix 4A.2, Transportation: Travel Forecast Tolling Scenario Summaries and Detailed Tables (2023 and 2045)

Daily Volumes									Percent Change						
		Scenario							Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
(by Screen Line/ Crossing)															
Total	1,414,585	1,213,964	1,209,856	1,186,011	1,165,190	1,148,053	1,171,689	1,190,707	-14%	-14%	-16%	-18%	-19%	-17%	-16%
Inbound	716,150	605,913	590,895	592,015	581,926	573,295	585,168	594,002	-15%	-17%	-17%	-19%	-20%	-18.3%	-17.1%
Outbound	698,410	608,023	593,230	593,964	583,232	574,733	586,493	596,676	-13%	-15%	-15%	-16%	-18%	-16%	-15%
Queens-Midtown Tunnel	81,327	74,328	74,686	96,377	123,959	123,537	124,338	73,830	-8.6%	-8.2%	18.5%	52.4%	51.9%	52.9%	-9.2%
am	19,352	18,072	18,054	20,872	23,344	23,234	23,540	18,078	-6.6%	-6.7%	7.9%	20.6%	20.1%	21.6%	-6.6%
md	28,738	26,581	26,541	29,530	36,234	35,960	36,463	26,369	-7.5%	-7.6%	2.8%	26.1%	25.1%	26.9%	-8.2%
pm	19,615	17,474	17,660	21,456	25,582	25,387	25,443	17,326	-10.9%	-10.0%	9.4%	30.4%	29.4%	29.7%	-11.7%
nt	13,622	12,201	12,431	24,519	38,799	38,956	38,892	12,057	-10.4%	-8.7%	80.0%	184.8%	186.0%	185.5%	-11.5%
Brooklyn	391,603	350,510	349,383	333,372	314,584	309,743	311,458	344,495	-10.5%	-10.8%	-14.9%	-19.7%	-20.9%	-20.5%	-12.0%
Inbound	187,486	168,154	164,160	152,790	138,880	137,092	137,368	165,509	-10.3%	-12.4%	-18.5%	-25.9%	-26.9%	-26.7%	-11.7%
Outbound	204,111	182,347	177,994	180,571	175,696	172,644	174,082	178,980	-10.7%	-12.8%	-11.5%	-13.9%	-15.4%	-14.7%	-12.3%
Williamsburg Bridge	122,207	101,542	101,260	93,732	78,130	75,951	78,004	98,789	-16.9%	-17.1%	-23.3%	-36.1%	-37.9%	-36.2%	-19.2%
am	25,067	20,643	20,367	19,853	18,651	18,153	18,242	20,011	-17.6%	-18.7%	-20.8%	-25.6%	-27.6%	-27.2%	-20.2%
md	34,143	28,314	28,522	27,192	23,711	23,398	24,101	27,740	-17.1%	-16.5%	-20.4%	-30.6%	-31.5%	-29.4%	-18.8%
pm	30,486	26,445	26,212	24,704	20,928	20,440	20,894	25,801	-13.3%	-14.0%	-19.0%	-31.4%	-33.0%	-31.5%	-15.4%
nt	32,511	26,140	26,159	21,983	14,840	13,960	14,767	25,237	-19.6%	-19.5%	-32.4%	-54.4%	-57.1%	-54.6%	-22.4%
Manhattan Bridge	88,594	68,593	68,021	55,533	38,195	35,697	36,567	66,289	-22.6%	-23.2%	-37.3%	-56.9%	-59.7%	-58.7%	-25.2%
am	23,956	18,859	18,743	15,548	11,715	11,042	10,791	18,221	-21.3%	-21.8%	-35.1%	-51.1%	-53.9%	-55.0%	-23.9%
md	24,322	19,680	19,369	16,184	10,759	10,020	10,688	18,987	-19.1%	-20.4%	-33.5%	-55.8%	-58.8%	-56.1%	-21.9%
pm	21,763	16,699	16,736	13,701	9,699	8,974	9,219	16,080	-23.3%	-23.1%	-37.0%	-55.4%	-58.8%	-57.6%	-26.1%
nt	18,553	13,355	13,173	10,100	6,022	5,661	5,869	13,001	-28.0%	-29.0%	-45.6%	-67.5%	-69.5%	-68.4%	-29.9%
Brooklyn Bridge	121,147	119,354	118,751	113,780	99,005	97,657	96,384	118,810	-1.5%	-2.0%	-6.1%	-18.3%	-19.4%	-20.4%	-1.9%
am	24,876	24,638	24,551	24,001	22,907	22,683	22,419	24,480	-1.0%	-1.3%	-3.5%	-7.9%	-8.8%	-9.9%	-1.6%
md	33,856	33,162	32,970	31,695	27,286	27,164	26,574	32,775	-2.0%	-2.6%	-6.4%	-19.4%	-19.8%	-21.5%	-3.2%
pm	27,157	26,147	25,932	25,090	23,246	23,114	22,988	25,899	-3.7%	-4.5%	-7.6%	-14.4%	-14.9%	-15.4%	-4.6%
nt	35,258	35,407	35,298	32,994	25,566	24,696	24,403	35,656	0.4%	0.1%	-6.4%	-27.5%	-30.0%	-30.8%	1.1%
Hugh Carey Tunnel	59,655	61,021	61,351	70,327	99,254	100,438	100,503	60,607	2.3%	2.8%	17.9%	66.4%	68.4%	68.5%	1.6%
am	16,739	17,349	17,445	18,493	21,045	21,096	21,440	17,352	3.6%	4.2%	10.5%	25.7%	26.0%	28.1%	3.7%
md	18,798	18,663	18,669	20,545	28,999	28,830	28,990	18,450	-0.7%	-0.7%	9.3%	54.3%	53.4%	54.2%	-1.9%
pm	18,908	18,624	18,590	20,647	25,589	25,367	25,619	18,468	-1.5%	-1.7%	9.2%	35.3%	34.2%	35.5%	-2.3%
nt	5,210	6,385	6,647	10,642	23,621	25,145	24,454	6,337	22.6%	27.6%	104.3%	353.4%	382.6%	369.4%	21.6%
New Jersey	223,898	188,240	185,513	193,380	197,992	190,755	196,409	181,759	-15.9%	-17.1%	-13.6%	-11.6%	-14.8%	-12.3%	-18.8%
Inbound	109,602	92,070	86,219	100,791	107,810	103,257	106,560	88,196	-16.0%	-21.3%	-8.0%	-1.6%	-5.8%	-2.8%	-19.5%
Outbound	114,290	96,168	91,173	92,588	90,177	87,493	89,844	93,558	-15.9%	-20.2%	-19.0%	-21.1%	-23.4%	-21.4%	-18.1%
Holland Tunnel	108,683	93,896	92,321	93,934	95,129	91,000	93,926	90,220	-13.6%	-15.1%	-13.6%	-12.5%	-16.3%	-13.6%	-17.0%
am	23,564	21,004	20,749	20,935	20,961	20,459	20,478	20,454	-10.9%	-11.9%	-11.2%	-11.0%	-13.2%	-13.1%	-13.2%
md	29,507	25,253	24,765	24,970	25,026	23,860	25,310	24,329	-14.4%	-16.1%	-15.4%	-15.2%	-19.1%	-14.2%	-17.5%
pm	23,778	20,848	20,700	20,854	21,078	20,120	20,216	20,366	-12.3%	-12.9%	-12.3%	-11.4%	-15.4%	-15.0%	-14.3%
nt	31,834	26,791	26,107	27,175	28,064	26,561	27,922	25,071	-15.8%	-18.0%	-14.6%	-11.8%	-16.6%	-12.3%	-21.2%
Lincoln Tunnel	115,215	94,344	93,192	99,446	102,863	99,755	102,483	91,539	-18.1%	-19.1%	-13.7%	-10.7%	-13.4%	-11.1%	-20.5%
am	24,429	21,961	21,786	22,644	23,212	22,660	22,816	21,565	-10.1%	-10.8%	-7.3%	-5.0%	-7.2%	-6.6%	-11.7%
md	33,640	26,859	26,371	27,640	28,354	27,110	28,984	25,969	-20.2%	-21.6%	-17.8%	-15.7%	-19.4%	-13.8%	-22.8%
pm	26,946	22,931	22,784	23,454	23,263	22,480	22,804	22,679	-14.9%	-15.4%	-13.0%	-13.7%	-16.6%	-15.4%	-15.8%
nt	30,200	22,593	22,251	25,708	28,034	27,505	27,879	21,326	-25.2%	-26.3%	-14.9%	-7.2%	-8.9%	-7.7%	-29.4%

Table 4A.2-4. Summary – Vehicle-Miles Traveled (2023)

Scenario	Daily VMT								Percent Change						
	No Action	Scenario							A	B	C	D	E	F	G
		A	B	C	D	E	F	G							
(by Screen Line/ Crossing)															
Manhattan CBD	3,244,791	2,993,214	2,998,489	2,984,080	2,963,211	2,946,339	3,016,013	2,970,819	-7.8%	-7.6%	-8.0%	-8.7%	-9.2%	-7.1%	-8.4%
New York City	47,131,752	46,743,670	46,784,237	46,572,720	46,461,121	46,404,913	46,578,412	46,713,541	-0.8%	-0.7%	-1.2%	-1.4%	-1.5%	-1.2%	-0.9%
Manhattan CBD	3,244,791	2,993,214	2,998,489	2,984,080	2,963,211	2,946,339	3,016,013	2,970,819	-7.8%	-7.6%	-8.0%	-8.7%	-9.2%	-7.1%	-8.4%
CBD Core	1,217,727	1,150,843	1,152,471	1,161,407	1,159,162	1,147,545	1,183,476	1,142,077	-5.5%	-5.4%	-4.6%	-4.8%	-5.8%	-2.8%	-6.2%
Peripheral Highways (south of 60th Street; excluded from the toll)	2,027,064	1,842,371	1,846,018	1,822,673	1,804,049	1,798,794	1,832,537	1,828,742	-9.1%	-8.9%	-10.1%	-11.0%	-11.3%	-9.6%	-9.8%
RT9A - S of 60th	610,657	510,785	513,887	493,396	485,167	486,404	501,603	508,951	-16.4%	-15.8%	-19.2%	-20.5%	-20.3%	-17.9%	-16.7%
FDR - S of 60th	720,682	725,459	729,706	718,820	705,903	710,555	721,421	727,101	0.7%	1.3%	-0.3%	-2.1%	-1.4%	0.1%	0.9%
Bridge & Tunnels - S of 60th*	695,725	606,127	602,425	610,457	612,979	601,835	609,513	592,690	-12.9%	-13.4%	-12.3%	-11.9%	-13.5%	-12.4%	-14.8%
Zone 1	2,218,077	2,049,561	2,049,528	2,004,366	1,955,714	1,944,168	1,962,310	2,031,243	-7.6%	-7.6%	-9.6%	-11.8%	-12.3%	-11.5%	-8.4%
Manhattan: 60th St - 82nd St	687,178	611,298	614,228	596,527	579,197	576,383	588,785	605,889	-11.0%	-10.6%	-13.2%	-15.7%	-16.1%	-14.3%	-11.8%
Long Island City	634,642	576,941	574,378	573,434	584,367	581,662	585,542	569,080	-9.1%	-9.5%	-9.6%	-7.9%	-8.3%	-7.7%	-10.3%
Downtown Brooklyn	507,721	490,094	489,809	469,669	438,875	434,721	434,188	487,809	-3.5%	-3.5%	-7.5%	-13.6%	-14.4%	-14.5%	-3.9%
Williamsburg	388,536	371,228	371,113	364,736	353,275	351,402	353,795	368,465	-4.5%	-4.5%	-6.1%	-9.1%	-9.6%	-8.9%	-5.2%
Zone 2	6,660,953	6,626,001	6,630,016	6,588,313	6,578,676	6,568,162	6,596,549	6,615,308	-0.5%	-0.5%	-1.1%	-1.2%	-1.4%	-1.0%	-0.7%
Manhattan: 82nd St - 126th St	1,683,098	1,664,870	1,674,332	1,654,877	1,629,759	1,624,558	1,644,204	1,674,029	-1.1%	-0.5%	-1.7%	-3.2%	-3.5%	-2.3%	-0.5%
Inner Brooklyn	2,382,944	2,364,550	2,364,723	2,342,062	2,352,282	2,350,184	2,351,128	2,356,477	-0.8%	-0.8%	-1.7%	-1.3%	-1.4%	-1.3%	-1.1%
Inner Queens	2,594,911	2,596,581	2,590,961	2,591,374	2,596,635	2,593,420	2,601,217	2,584,802	0.1%	-0.2%	-0.1%	0.1%	-0.1%	0.2%	-0.4%
Zone 3	35,007,931	35,074,894	35,106,204	34,995,961	34,963,520	34,946,244	35,003,540	35,096,171	0.2%	0.3%	0.0%	-0.1%	-0.2%	0.0%	0.3%
Upper Manhattan: Above 126th St	1,668,523	1,666,606	1,673,122	1,655,734	1,629,152	1,623,144	1,633,549	1,676,495	-0.1%	0.3%	-0.8%	-2.4%	-2.7%	-2.1%	0.5%
Outer Brooklyn	6,682,723	6,685,405	6,695,192	6,683,132	6,677,077	6,672,230	6,674,480	6,701,884	0.0%	0.2%	0.0%	-0.1%	-0.2%	-0.1%	0.3%
Outer Queens	15,180,594	15,139,719	15,150,768	15,086,757	15,101,340	15,099,256	15,119,805	15,121,886	-0.3%	-0.2%	-0.6%	-0.5%	-0.5%	-0.4%	-0.4%
Staten Island	3,986,457	4,071,055	4,078,180	4,078,983	4,076,004	4,085,745	4,080,602	4,098,570	2.1%	2.3%	2.3%	2.2%	2.5%	2.4%	2.8%
Bronx	7,489,634	7,512,109	7,508,942	7,491,355	7,479,947	7,465,869	7,495,104	7,497,336	0.3%	0.3%	0.0%	-0.1%	-0.3%	0.1%	0.1%
New York State	122,186,497	121,752,302	121,789,089	121,438,634	121,227,956	121,111,122	121,464,091	121,662,622	-0.4%	-0.3%	-0.6%	-0.8%	-0.9%	-0.6%	-0.4%
New York City	47,131,752	46,743,670	46,784,237	46,572,720	46,461,121	46,404,913	46,578,412	46,713,541	-0.8%	-0.7%	-1.2%	-1.4%	-1.5%	-1.2%	-0.9%
Long Island	41,585,545	41,609,407	41,595,736	41,546,248	41,503,705	41,497,676	41,598,789	41,573,420	0.1%	0.0%	-0.1%	-0.2%	-0.2%	0.0%	0.0%
Upstate	33,469,200	33,399,225	33,409,116	33,319,666	33,263,130	33,208,533	33,286,890	33,375,661	-0.2%	-0.2%	-0.4%	-0.6%	-0.8%	-0.5%	-0.3%
Connecticut	34,909,870	34,878,673	34,856,848	34,830,279	34,846,493	34,842,671	34,893,239	34,844,682	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	0.0%	-0.2%
New Jersey	97,578,100	97,594,939	97,590,826	97,748,567	97,733,034	97,665,181	97,768,338	97,642,310	0.0%	0.0%	0.2%	0.2%	0.1%	0.2%	0.1%
Total	254,674,467	254,225,914	254,236,763	254,017,480	253,807,483	253,618,974	254,125,668	254,149,614	-0.2%	-0.2%	-0.3%	-0.3%	-0.4%	-0.2%	-0.2%

Table 4A.2-5. Transit Boardings by Mode (2023)

Mode	Transit Boardings (AM Period)															Change					Percent Change						
	No Action	Scenario							Scenario							Scenario											
		A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G					
Total Volume	6,352,866	6,432,577	6,434,921	6,449,184	6,457,649	6,465,941	6,461,019	6,438,473	79,711	82,055	96,318	104,784	113,075	108,154	85,607	1.3%	1.3%	1.5%	1.6%	1.8%	1.7%	1.3%					
Commuter Rail	454,520	456,756	457,863	459,632	461,635	463,109	462,013	458,867	2,236	3,343	5,112	7,115	8,589	7,493	4,346	0.5%	0.7%	1.1%	1.6%	1.9%	1.6%	1.0%					
Long Island Rail Road	142,651	143,452	143,989	144,244	144,733	145,544	144,560	144,084	802	1,339	1,593	2,083	2,894	1,910	1,433	0.6%	0.9%	1.1%	1.5%	2.0%	1.3%	1.0%					
Metro-North Railroad	152,203	153,128	153,437	154,108	154,850	154,296	155,020	153,491	925	1,234	1,905	2,647	2,093	2,817	1,288	0.6%	0.8%	1.3%	1.7%	1.4%	1.9%	0.8%					
New Jersey Transit Rail	159,666	160,175	160,437	161,280	162,051	163,268	162,433	161,292	509	770	1,614	2,385	3,602	2,767	1,626	0.3%	0.5%	1.0%	1.5%	2.3%	1.7%	1.0%					
Urban Rail	3,151,234	3,197,895	3,200,431	3,205,407	3,212,195	3,215,961	3,212,751	3,202,009	46,661	49,197	54,173	60,961	64,727	61,517	50,775	1.5%	1.6%	1.7%	1.9%	2.1%	2.0%	1.6%					
NYCT Subway	3,005,224	3,050,101	3,052,683	3,056,840	3,063,552	3,066,614	3,063,577	3,053,144	44,877	47,459	51,616	58,328	61,390	58,353	47,920	1.5%	1.6%	1.7%	1.9%	2.0%	1.9%	1.6%					
PATH	133,736	134,860	134,691	135,588	135,818	136,438	136,206	135,934	1,124	955	1,852	2,082	2,702	2,471	2,198	0.8%	0.7%	1.4%	1.6%	2.0%	1.8%	1.6%					
SIRR	12,274	12,934	13,057	12,978	12,826	12,909	12,967	12,931	660	783	704	552	635	694	657	5.4%	6.4%	5.7%	4.5%	5.2%	5.7%	5.4%					
Bus	2,689,564	2,718,960	2,717,507	2,724,787	2,724,456	2,727,511	2,726,657	2,718,457	29,396	27,943	35,224	34,892	37,948	37,093	28,893	1.1%	1.0%	1.3%	1.3%	1.4%	1.4%	1.1%					
NYCT Bus	2,037,319	2,063,136	2,062,997	2,068,001	2,067,753	2,069,107	2,068,898	2,062,926	25,817	25,678	30,682	30,434	31,788	31,579	25,607	1.3%	1.3%	1.5%	1.5%	1.6%	1.6%	1.3%					
NJT Bus	471,109	474,344	473,456	474,079	474,279	476,321	475,663	474,260	3,235	2,347	2,970	3,170	5,212	4,554	3,151	0.7%	0.5%	0.6%	0.7%	1.1%	1.0%	0.7%					
Others	181,136	181,480	181,053	182,707	182,424	182,084	182,096	181,271	345	-83	1,571	1,288	948	960	136	0.2%	0.0%	0.9%	0.7%	0.5%	0.5%	0.1%					
Other Transit	57,548	58,966	59,120	59,358	59,363	59,360	59,598	59,140	1,418	1,572	1,810	1,815	1,811	2,050	1,592	2.5%	2.7%	3.1%	3.2%	3.1%	3.6%	2.8%					
Ferries	57,548	58,966	59,120	59,358	59,363	59,360	59,598	59,140	1,418	1,572	1,810	1,815	1,811	2,050	1,592	2.5%	2.7%	3.1%	3.2%	3.1%	3.6%	2.8%					
Roosevelt Tram	153	154	154	156	154	154	155	159	1	1	3	1	1	2	6	0.5%	0.8%	1.7%	0.6%	0.7%	1.0%	4.1%					

Table 4A.2-6. Cordon Volumes by Station/Route (2023)

Cordon Volumes (AM Peak Period)																Percent Change						
	Baseline	Scenario							Scenario							Scenario						
	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G
Commuter Rail																						
Inbound	240,930	242,734	243,593	244,140	245,232	245,754	245,205	243,572	1,804	2,663	3,210	4,302	4,824	4,274	2,641	0.7%	1.1%	1.3%	1.8%	2.0%	1.8%	1.1%
Long Island Rail Road (Penn Station)	83,870	84,697	84,929	84,903	85,326	85,825	85,285	84,960	827	1,059	1,033	1,456	1,955	1,416	1,091	1.0%	1.3%	1.2%	1.7%	2.3%	1.7%	1.3%
Metro-North Railroad (Grand Central Terminal)	97,340	97,832	98,426	99,003	99,215	98,861	99,258	98,133	492	1,086	1,663	1,875	1,521	1,918	793	0.5%	1.1%	1.7%	1.9%	1.6%	2.0%	0.8%
New Jersey Transit (New York - Penn Station)	59,721	60,205	60,239	60,235	60,691	61,068	60,662	60,478	484	518	514	970	1,348	941	757	0.8%	0.9%	0.9%	1.6%	2.3%	1.6%	1.3%
Scenario		A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G
NYCT Subway																						
Inbound	878,509	891,951	892,551	894,951	898,214	899,469	898,532	892,734	13,442	14,043	16,442	19,705	20,960	20,023	14,225	1.5%	1.6%	1.9%	2.2%	2.4%	2.3%	1.6%
60th Street Cordon	276,917	280,723	280,491	281,147	282,960	283,386	282,138	280,980	3,806	3,575	4,230	6,043	6,470	5,221	4,063	1.4%	1.3%	1.5%	2.2%	2.3%	1.9%	1.5%
Broadway (1,2,3)	74,725	75,638	75,573	75,834	76,444	76,571	76,077	75,661	913	848	1,109	1,719	1,846	1,352	936	1.2%	1.1%	1.5%	2.3%	2.5%	1.8%	1.3%
8th Avenue (A, C, B, D)	88,153	89,321	89,270	89,419	89,950	90,086	89,703	89,413	1,168	1,117	1,266	1,797	1,933	1,550	1,260	1.3%	1.3%	1.4%	2.0%	2.2%	1.8%	1.4%
Lexington Avenue (4, 5, 6)	89,537	90,920	90,841	91,003	91,510	91,610	91,460	91,015	1,383	1,303	1,465	1,973	2,073	1,922	1,478	1.5%	1.5%	1.6%	2.2%	2.3%	2.1%	1.7%
2nd Avenue (Q)	24,502	24,843	24,808	24,891	25,055	25,119	24,898	24,890	342	307	390	553	618	397	389	1.4%	1.3%	1.6%	2.3%	2.5%	1.6%	1.6%
Queens Cordon	249,675	254,348	253,872	254,674	255,134	256,033	255,951	254,032	4,673	4,198	4,999	5,460	6,358	6,276	4,357	1.9%	1.7%	2.0%	2.2%	2.5%	2.5%	1.7%
63rd Street (F)	53,897	54,770	54,677	54,762	54,801	54,970	54,909	54,829	874	780	865	904	1,073	1,012	933	1.6%	1.4%	1.6%	1.7%	2.0%	1.9%	1.7%
60th Street (R)	18,272	18,816	18,772	18,907	18,905	19,073	19,062	18,805	544	500	635	633	801	790	533	3.0%	2.7%	3.5%	3.5%	4.4%	4.3%	2.9%
60th Street (N, W)	30,668	31,268	31,140	31,314	31,370	31,424	31,476	31,158	600	472	647	703	756	808	490	2.0%	1.5%	2.1%	2.3%	2.5%	2.6%	1.6%
53rd Street (E, M)	78,555	79,837	79,848	80,008	80,143	80,444	80,400	79,787	1,282	1,293	1,453	1,588	1,889	1,845	1,232	1.6%	1.6%	1.8%	2.0%	2.4%	2.3%	1.6%
Steinway Tunnel (7)	68,283	69,656	69,436	69,683	69,915	70,122	70,104	69,452	1,373	1,153	1,400	1,632	1,839	1,821	1,169	2.0%	1.7%	2.1%	2.4%	2.7%	2.7%	1.7%
Brooklyn Cordon	351,917	356,879	358,188	359,130	360,120	360,050	360,443	357,722	4,962	6,271	7,213	8,203	8,133	8,526	5,805	1.4%	1.8%	2.0%	2.3%	2.3%	2.4%	1.6%
14th Street (L)	42,607	43,209	43,337	43,466	43,573	43,562	43,583	43,316	602	730	859	966	955	976	709	1.4%	1.7%	2.0%	2.3%	2.2%	2.3%	1.7%
Williamsburg Bridge (J, M, Z)	37,216	37,924	38,050	38,256	38,366	38,408	38,411	38,070	708	834	1,040	1,150	1,193	1,195	854	1.9%	2.2%	2.8%	3.1%	3.2%	3.2%	2.3%
Rutgers Street (F)	37,006	37,403	37,504	37,709	37,807	37,822	37,921	37,495	397	498	702	801	815	915	488	1.1%	1.3%	1.9%	2.2%	2.2%	2.5%	1.3%
Manhattan Bridge (B, D, N, Q)	100,921	102,440	102,952	103,144	103,654	103,527	103,630	102,549	1,520	2,031	2,224	2,734	2,606	2,710	1,628	1.5%	2.0%	2.2%	2.7%	2.6%	2.7%	1.6%
Cranberry Street (A, C)	66,013	66,783	66,866	67,001	67,063	67,061	67,173	66,976	770	854	988	1,050	1,049	1,160	963	1.2%	1.3%	1.5%	1.6%	1.6%	1.8%	1.5%
Clark Street (2, 3)	29,316	29,788	29,874	29,944	29,992	30,073	30,030	29,845	472	557	628	676	757	714	529	1.6%	1.9%	2.1%	2.3%	2.6%	2.4%	1.8%
Montague Street (R)	10,143	10,164	10,167	10,243	10,218	10,258	10,301	10,205	21	25	101	75	116	158	63	0.2%	0.2%	1.0%	0.7%	1.1%	1.6%	0.6%
Joralmon Street (4, 5)	28,696	29,168	29,437	29,367	29,446	29,338	29,393	29,267	472	741	671	750	643	697	571	1.6%	2.6%	2.3%	2.6%	2.2%	2.4%	2.0%
PATH																						
Inbound	112,505	113,767	113,566	114,289	114,542	115,239	115,042	114,476	1,262	1,061	1,784	2,038	2,735	2,537	1,972	1.1%	0.9%	1.6%	1.6%	2.4%	2.3%	1.8%
Christopher Street	40,731	41,399	41,286	41,537	41,837	42,286	42,068	41,661	668	554	806	1,106	1,555	1,337	930	1.6%	1.4%	2.0%	2.7%	3.8%	3.3%	2.3%
World Trade Center	71,773	72,368	72,280	72,752	72,705	72,953	72,974	72,815	595	507	978	932	1,179	1,201	1,042	0.8%	0.7%	1.4%	1.3%	1.6%	1.7%	1.5%

Table 4A.2-7. Change in Mode Share to the Manhattan CBD (2023)

Daily Journeys									Percent Change						
Scenario									Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
Total Person Journeys to CBD	1,923,709	1,923,389	1,926,803	1,924,490	1,918,125	1,919,494	1,924,087	1,922,925	0%	0%	0%	0%	0%	0%	0%
Drive Alone	191,338	177,348	174,838	169,542	164,844	158,694	160,639	173,398	-7%	-9%	-11%	-14%	-17%	-16%	-9%
HOV / Shared Ride	143,494	143,308	141,797	141,450	140,446	137,800	139,564	143,075	0%	-1%	-1%	-2%	-4%	-3%	0%
Taxi / FHV	32,324	25,270	31,884	28,323	19,944	25,762	31,739	23,871	-22%	-1%	-12%	-38%	-20%	-2%	-26%
Commuter Rail	369,131	374,592	375,796	376,912	379,603	381,204	379,710	376,742	1%	2%	2%	3%	3%	3%	2%
Other Transit (e.g., subway / bus)	1,131,771	1,147,036	1,147,670	1,152,765	1,157,977	1,161,024	1,157,362	1,150,352	1%	1%	2%	2%	3%	2%	2%
Walk and Bike	51,958	51,873	50,891	51,547	51,227	51,059	51,138	51,648	0%	-2%	-1%	-1%	-2%	-2%	-1%
School Bus	3,693	3,962	3,927	3,951	4,084	3,951	3,935	3,839	7%	6%	7%	11%	7%	7%	4%
Total Person Journeys from CBD	161,833	159,806	160,976	160,207	158,892	158,479	159,884	159,898	-1%	-1%	-1%	-2%	-2%	-1%	-1%
Drive Alone	13,638	12,441	12,446	12,085	12,025	11,535	11,800	12,389	-9%	-9%	-11%	-12%	-15%	-13%	-9%
HOV / Shared Ride	30,100	29,714	29,269	29,160	28,667	28,300	28,587	29,225	-1%	-3%	-3%	-5%	-6%	-5%	-3%
Taxi / FHV	4,366	3,184	4,168	3,669	2,372	3,124	3,916	2,960	-27%	-5%	-16%	-46%	-28%	-10%	-32%
Commuter Rail	3,120	2,954	2,960	3,007	2,951	3,019	2,927	3,060	-5%	-5%	-4%	-5%	-3%	-6%	-2%
Other Transit (e.g., subway / bus)	78,771	79,372	79,771	79,881	80,507	80,096	80,195	79,856	1%	1%	1%	2%	2%	2%	1%
Walk and Bike	29,188	29,371	29,564	29,703	29,588	29,593	29,601	29,634	1%	1%	2%	1%	1%	1%	2%
School Bus	2,650	2,770	2,798	2,702	2,782	2,812	2,858	2,774	5%	6%	2%	5%	6%	8%	5%
Total Person Journeys within CBD	879,667	880,292	879,506	882,033	883,365	883,222	880,713	881,592	0%	0%	0%	0%	0%	0%	0%
Drive Alone	7,581	7,576	7,652	7,679	7,650	7,610	7,546	7,778	0%	1%	1%	1%	0%	0%	3%
HOV / Shared Ride	26,570	26,798	27,222	27,220	27,024	26,846	26,607	27,705	1%	2%	2%	2%	1%	0%	4%
Taxi / FHV	28,005	27,711	28,262	28,003	28,397	28,195	28,082	28,619	-1%	1%	0%	1%	1%	0%	2%
Commuter Rail									-	-	-	-	-	-	-
Other Transit (e.g., subway / bus)	240,385	241,162	239,319	241,255	242,475	242,522	241,327	239,993	0%	0%	0%	1%	1%	0%	0%
Walk and Bike	572,877	572,877	572,805	573,716	573,689	573,977	573,110	573,376	0%	0%	0%	0%	0%	0%	0%
School Bus	4,249	4,168	4,246	4,160	4,130	4,072	4,041	4,121	-2%	0%	-2%	-3%	-4%	-5%	-3%

Table 4A.2-8. Taxi and FHV Toll Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2023)

	Daily Volumes								Percent Change						
		Scenario							Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
(by Screen Line/ Crossing)															
Total	113,058	113,749	128,235	123,915	108,180	120,128	133,196	110,059	0.6%	13.4%	9.6%	-4.3%	6.3%	17.8%	-2.7%
60th Street	39,536	36,877	45,022	45,026	37,509	43,401	50,894	34,730	-6.7%	13.9%	13.9%	-5.1%	9.8%	28.7%	-12.2%
Inbound	21,015	20,019	24,298	25,149	21,748	24,771	28,755	18,992	-4.7%	15.6%	19.7%	3.5%	17.9%	36.8%	-9.6%
Outbound	18,551	16,890	20,758	19,906	15,791	18,661	22,168	15,771	-9.0%	11.9%	7.3%	-14.9%	0.6%	19.5%	-15.0%
FDR DRIVE+WEST SIDE HWY	23,612	18,074	22,638	22,250	16,844	20,638	25,349	16,906	-23.5%	-4.1%	-5.8%	-28.7%	-12.6%	7.4%	-28.4%
West Side Highway / Route 9A	10,965	8,425	10,350	9,694	6,992	8,839	10,899	7,945	-23.2%	-5.6%	-11.6%	-36.2%	-19.4%	-0.6%	-27.5%
FDR Drive	12,647	9,649	12,288	12,556	9,852	11,799	14,450	8,961	-23.7%	-2.8%	-0.7%	-22.1%	-6.7%	14.3%	-29.1%
WEST AVENUES	6,720	4,749	6,108	5,172	4,408	5,320	6,114	4,499	-29.3%	-9.1%	-23.0%	-34.4%	-20.8%	-9.0%	-33.1%
West End Ave	946	626	813	623	340	506	728	545	-33.8%	-14.1%	-34.1%	-64.1%	-46.5%	-23.0%	-42.4%
Broadway	2,734	1,614	2,097	1,706	1,235	1,579	1,791	1,575	-41.0%	-23.3%	-37.6%	-54.8%	-42.2%	-34.5%	-42.4%
Amsterdam	1,292	1,227	1,602	1,406	1,475	1,732	1,895	1,156	-5.0%	24.0%	8.8%	14.2%	34.1%	46.7%	-10.5%
Columbus Ave	1,258	694	903	635	449	518	660	636	-44.8%	-28.2%	-49.5%	-64.3%	-58.8%	-47.5%	-49.4%
Eighth Avenue	490	588	693	802	909	985	1,040	587	20.0%	41.4%	63.7%	85.5%	101.0%	112.2%	19.8%
EAST AVENUES	9,204	14,054	16,276	17,604	16,257	17,443	19,431	13,325	52.7%	76.8%	91.3%	76.6%	89.5%	111.1%	44.8%
Fifth Avenue	1,472	914	1,142	863	623	706	877	801	-37.9%	-22.4%	-41.4%	-57.7%	-52.0%	-40.4%	-45.6%
Madison Avenue	236	162	179	178	125	101	104	136	-31.4%	-24.2%	-24.6%	-47.0%	-57.2%	-55.9%	-42.4%
Park Avenue	1,739	1,405	1,622	1,571	1,233	1,349	1,561	1,315	-19.2%	-6.7%	-9.7%	-29.1%	-22.4%	-10.2%	-24.4%
Lexington Avenue	651	906	1,045	1,550	1,192	1,338	1,426	852	39.2%	60.5%	138.1%	83.1%	105.5%	119.0%	30.9%
Third Avenue	898	580	791	852	705	872	999	590	-35.4%	-11.9%	-5.1%	-21.5%	-2.9%	11.2%	-34.3%
Second Avenue	1,086	5,247	5,852	6,360	6,964	7,292	7,863	5,107	383.1%	438.9%	485.6%	541.3%	571.5%	624.0%	370.3%
First Avenue	380	1,232	1,360	1,263	1,715	1,570	1,850	1,118	224.2%	257.9%	232.4%	351.3%	313.2%	386.8%	194.2%
York Avenue	2,108	1,649	1,899	1,616	1,321	1,522	1,821	1,562	-21.8%	-9.9%	-23.3%	-37.3%	-27.8%	-13.6%	-25.9%
Ed Koch Queensboro Ramp	634	1,959	2,386	3,351	2,379	2,693	2,930	1,844	209.0%	276.3%	428.5%	275.2%	324.8%	362.1%	190.9%
Queens	39,427	43,248	45,890	40,624	34,508	37,005	38,519	42,528	9.7%	16.4%	3.0%	-12.5%	-6.1%	-2.3%	7.9%
Inbound	20,102	21,565	22,906	17,668	14,714	15,785	16,512	21,119	7.3%	13.9%	-12.1%	-26.8%	-21.5%	-17.9%	5.1%
Outbound	19,327	21,685	22,985	22,960	19,797	21,223	22,011	21,412	12.2%	18.9%	18.8%	2.4%	9.8%	13.9%	10.8%
Ed Koch Queensboro Bridge	5,320	10,140	11,429	19,506	25,473	27,371	28,479	9,678	90.6%	114.8%	266.7%	378.8%	414.5%	435.3%	81.9%
Queens-Midtown Tunnel	34,107	33,108	34,461	21,118	9,035	9,634	10,040	32,850	-2.9%	1.0%	-38.1%	-73.5%	-71.8%	-70.6%	-3.7%
Brooklyn	23,211	19,207	22,881	24,457	22,499	25,535	29,748	18,339	-17.3%	-1.4%	5.4%	-3.1%	10.0%	28.2%	-21.0%
Inbound	10,709	8,597	10,322	13,250	12,184	13,659	15,808	8,189	-19.7%	-3.6%	23.7%	13.8%	27.5%	47.6%	-23.5%
Outbound	12,509	10,618	12,566	11,212	10,320	11,884	13,946	10,158	-15.1%	0.5%	-10.4%	-17.5%	-5.0%	11.5%	-18.8%
Williamsburg Bridge	5,544	5,468	7,013	9,046	10,687	12,260	13,904	5,435	-1.4%	26.5%	63.2%	92.8%	121.1%	150.8%	-2.0%
Manhattan Bridge	2,245	1,681	2,454	2,286	1,725	2,348	3,080	1,519	-25.1%	9.3%	1.8%	-23.2%	4.6%	37.2%	-32.3%
Brooklyn Bridge	2,576	1,455	1,870	1,902	2,503	2,832	3,630	1,278	-43.5%	-27.4%	-26.2%	-2.8%	9.9%	40.9%	-50.4%
Hugh Carey Tunnel	12,846	10,603	11,544	11,223	7,584	8,095	9,134	10,107	-17.5%	-10.1%	-12.6%	-41.0%	-37.0%	-28.9%	-21.3%
New Jersey	10,884	14,417	14,442	13,808	13,664	14,187	14,035	14,462	32.5%	32.7%	26.9%	25.5%	30.3%	29.0%	32.9%
Inbound	5,251	7,149	7,146	6,497	6,014	6,530	6,336	7,187	36.1%	36.1%	23.7%	14.5%	24.4%	20.7%	36.9%
Outbound	5,637	7,272	7,299	7,314	7,654	7,661	7,701	7,278	29.0%	29.5%	29.7%	35.8%	35.9%	36.6%	29.1%
Holland Tunnel	3,718	6,301	6,525	6,292	6,659	6,984	6,788	6,681	69.5%	75.5%	69.2%	79.1%	87.8%	82.6%	79.7%
Lincoln Tunnel	7,166	8,116	7,917	7,516	7,005	7,203	7,247	7,781	13.3%	10.5%	4.9%	-2.2%	0.5%	1.1%	8.6%

Note: Taxis and FHVs would potentially be exempt from the CBD toll, receive a toll discount, or be subject to some other toll reduction such as a cap.

Table 4A.2-9. Truck Toll Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2023)

Scenario (by Screen Line/ Crossing)	Daily Volumes								Percent Change						
	Scenario								Scenario						
	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
Total	121,537	108,532	107,799	105,607	105,409	102,104	98,811	113,863	-10.7%	-11.3%	-13.1%	-13.3%	-16.0%	-18.7%	-6.3%
60th Street	46,128	37,375	37,158	35,747	35,140	33,948	34,905	39,058	-19.0%	-19.4%	-22.5%	-23.8%	-26.4%	-24.3%	-15.3%
Inbound	23,792	18,572	18,388	17,224	16,602	15,978	16,584	19,559	-21.9%	-22.7%	-27.6%	-30.2%	-32.8%	-30.3%	-17.8%
Outbound	22,366	18,829	18,800	18,550	18,564	18,000	18,350	19,528	-15.8%	-15.9%	-17.1%	-17.0%	-19.5%	-18.0%	-12.7%
FDR DRIVE+WEST SIDE HWY	4,118	4,202	4,281	4,338	4,749	4,684	4,816	4,388	2.0%	4.0%	5.3%	15.3%	13.7%	16.9%	6.6%
West Side Highway / Route 9A	1,366	1,962	1,995	1,990	2,186	2,058	2,223	2,067	43.6%	46.0%	45.7%	60.0%	50.7%	62.7%	51.3%
FDR Drive	2,752	2,240	2,286	2,348	2,563	2,626	2,593	2,321	-18.6%	-16.9%	-14.7%	-6.9%	-4.6%	-5.8%	-15.7%
WEST AVENUES	16,382	13,660	13,505	12,789	12,718	12,321	12,642	14,132	-16.6%	-17.6%	-21.9%	-22.4%	-24.8%	-22.8%	-13.7%
West End Ave	3,555	1,974	1,883	1,261	1,118	839	1,066	2,161	-44.5%	-47.0%	-64.5%	-68.6%	-76.4%	-70.0%	-39.2%
Broadway	5,864	6,029	6,073	6,143	6,320	6,379	6,291	5,967	2.8%	3.6%	4.8%	7.8%	8.8%	7.3%	1.8%
Amsterdam	3,616	2,361	2,233	1,934	1,758	1,627	1,716	2,691	-34.7%	-38.2%	-46.5%	-51.4%	-55.0%	-52.5%	-25.6%
Columbus Ave	2,269	2,162	2,177	2,260	2,326	2,292	2,376	2,185	-4.7%	-4.1%	-0.4%	2.5%	1.0%	4.7%	-3.7%
Eighth Avenue	1,078	1,134	1,139	1,191	1,196	1,184	1,193	1,128	5.2%	5.7%	10.5%	10.9%	9.8%	10.7%	4.6%
EAST AVENUES	25,628	19,513	19,372	18,620	17,673	16,943	17,447	20,538	-23.9%	-24.4%	-27.3%	-31.0%	-33.9%	-31.9%	-19.9%
Fifth Avenue	1,933	1,596	1,579	1,498	1,476	1,483	1,461	1,592	-17.4%	-18.3%	-22.5%	-23.6%	-23.3%	-24.4%	-17.6%
Madison Avenue	773	755	752	758	753	730	748	706	-2.3%	-2.7%	-1.9%	-2.6%	-5.6%	-3.2%	-8.7%
Park Avenue	4,132	3,438	3,465	3,368	3,298	3,288	3,246	3,553	-16.8%	-16.1%	-18.5%	-20.2%	-20.4%	-21.4%	-14.0%
Lexington Avenue	3,086	2,568	2,536	2,661	2,672	2,662	2,720	2,505	-16.8%	-17.8%	-13.8%	-13.4%	-13.7%	-11.9%	-18.8%
Third Avenue	3,705	3,708	3,744	3,639	3,586	3,381	3,575	3,763	0.1%	1.1%	-1.8%	-3.2%	-8.7%	-3.5%	1.6%
Second Avenue	5,643	3,980	3,869	3,381	2,689	2,332	2,544	4,763	-29.5%	-31.4%	-40.1%	-52.3%	-58.7%	-54.9%	-15.6%
First Avenue	2,583	2,353	2,351	2,365	2,296	2,162	2,267	2,599	-8.9%	-9.0%	-8.4%	-11.1%	-16.3%	-12.2%	0.6%
York Avenue	1,189	779	737	630	584	575	576	721	-34.5%	-38.0%	-47.0%	-50.9%	-51.6%	-51.6%	-39.4%
Ed Koch Queensboro Ramp	2,584	336	339	320	319	330	310	336	-87.0%	-86.9%	-87.6%	-87.7%	-87.2%	-88.0%	-87.0%
Queens	23,198	21,929	21,746	21,178	20,879	20,143	20,635	23,063	-5.5%	-6.3%	-8.7%	-10.0%	-13.2%	-11.0%	-0.6%
Inbound	12,762	11,950	11,901	11,851	11,382	11,070	11,060	12,299	-6.4%	-6.7%	-7.1%	-10.8%	-13.3%	-13.3%	-3.6%
Outbound	10,440	9,983	9,848	9,330	9,501	9,077	9,579	10,767	-4.4%	-5.7%	-10.6%	-9.0%	-13.1%	-8.2%	3.1%
Ed Koch Queensboro Bridge	17,286	16,372	16,281	15,812	14,156	13,259	14,675	17,578	-5.3%	-5.8%	-8.5%	-18.1%	-23.3%	-15.1%	1.7%
Queens-Midtown Tunnel	5,912	5,557	5,465	5,366	6,723	6,884	5,960	5,485	-6.0%	-7.6%	-9.2%	13.7%	16.4%	0.8%	-7.2%
Brooklyn	33,616	32,029	31,900	31,460	31,774	30,914	25,829	33,088	-4.7%	-5.1%	-6.4%	-5.5%	-8.0%	-23.2%	-1.6%
Inbound	15,032	14,504	14,467	13,958	14,295	13,857	11,482	15,020	-3.5%	-3.8%	-7.1%	-4.9%	-7.8%	-23.6%	-0.1%
Outbound	18,590	17,534	17,439	17,510	17,486	17,064	14,353	18,075	-5.7%	-6.2%	-5.8%	-5.9%	-8.2%	-22.8%	-2.8%
Williamsburg Bridge	8,582	8,741	8,694	8,806	8,596	8,598	8,375	8,972	1.9%	1.3%	2.6%	0.2%	0.2%	-2.4%	4.5%
Manhattan Bridge	12,781	10,887	10,816	11,164	9,900	9,763	9,390	11,747	-14.8%	-15.4%	-12.7%	-22.5%	-23.6%	-26.5%	-8.1%
Brooklyn Bridge	4,486	4,255	4,256	4,332	4,934	4,973	3,717	4,298	-5.1%	-5.1%	-3.4%	10.0%	10.9%	-17.1%	-4.2%
Hugh Carey Tunnel	7,767	8,146	8,134	7,158	8,344	7,580	4,347	8,071	4.9%	4.7%	-7.8%	7.4%	-2.4%	-44.0%	3.9%
New Jersey	18,595	17,199	16,995	17,222	17,616	17,099	17,442	18,654	-7.5%	-8.6%	-7.4%	-5.3%	-8.0%	-6.2%	0.3%
Inbound	10,551	9,890	9,759	10,342	10,896	10,605	10,489	10,651	-6.3%	-7.5%	-2.0%	3.3%	0.5%	-0.6%	0.9%
Outbound	8,047	7,311	7,238	6,883	6,722	6,495	6,957	8,008	-9.1%	-10.1%	-14.5%	-16.5%	-19.3%	-13.5%	-0.5%
Holland Tunnel	9,305	9,131	9,065	9,078	9,152	8,935	9,209	9,941	-1.9%	-2.6%	-2.4%	-1.6%	-4.0%	-1.0%	6.8%
Lincoln Tunnel	9,290	8,068	7,930	8,144	8,464	8,164	8,233	8,713	-13.2%	-14.6%	-12.3%	-8.9%	-12.1%	-11.4%	-6.2%

Table 4A.2-10. Work Journeys to the Manhattan CBD by Origin County (2023)

Scenario	Daily Journeys								Percent Change						
	No Action	Scenario							A	B	C	D	E	F	G
		A	B	C	D	E	F	G							
Total Work Journeys to CBD	1,561,067	1,561,030	1,561,015	1,561,093	1,561,040	1,561,081	1,561,059	1,561,017	0%	0%	0%	0%	0%	0%	0%
CBD	164,814	165,096	164,894	165,304	165,480	165,649	165,289	165,093	0%	0%	0%	0%	1%	0%	0%
CBD	164,814	165,096	164,894	165,304	165,480	165,649	165,289	165,093	0%	0%	0%	0%	1%	0%	0%
New York City	843,655	839,085	838,585	837,467	835,931	835,102	835,957	837,507	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Upper Manhattan	175,876	174,686	175,138	174,570	174,556	174,752	174,170	174,207	-1%	0%	-1%	-1%	-1%	-1%	-1%
Bronx	97,518	96,911	96,821	96,598	96,359	96,172	96,741	96,409	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Brooklyn	282,439	280,663	280,595	279,906	279,684	279,165	280,197	280,463	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Queens	260,444	258,756	257,996	257,996	257,335	256,897	256,624	258,367	-1%	-1%	-1%	-1%	-1%	-1%	-1%
Staten Island	27,378	28,069	28,035	28,397	27,997	28,116	28,225	28,061	3%	2%	4%	2%	3%	3%	2%
Long Island	128,802	131,412	131,993	131,253	131,272	131,777	130,636	132,202	2%	2%	2%	2%	2%	1%	3%
Nassau	87,416	89,363	89,962	89,120	88,381	88,830	87,993	89,996	2%	3%	2%	1%	2%	1%	3%
Suffolk	41,386	42,049	42,031	42,133	42,891	42,947	42,643	42,206	2%	2%	2%	4%	4%	3%	2%
Upstate New York	101,745	99,988	100,411	100,742	100,272	100,014	100,247	100,347	-2%	-1%	-1%	-1%	-2%	-1%	-1%
Dutchess	5,989	5,960	5,909	5,982	5,987	6,031	5,961	6,065	0%	-1%	0%	0%	1%	0%	1%
Orange	14,672	14,595	14,741	14,940	15,391	15,585	15,418	14,754	-1%	0%	2%	5%	6%	5%	1%
Putnam	1,648	1,665	1,628	1,629	1,618	1,685	1,645	1,663	1%	-1%	-1%	-2%	2%	0%	1%
Rockland	8,569	8,310	8,504	8,396	8,526	8,509	8,247	8,518	-3%	-1%	-2%	-1%	-1%	-4%	-1%
Westchester	70,867	69,458	69,629	69,795	68,750	68,204	68,976	69,347	-2%	-2%	-2%	-3%	-4%	-3%	-2%
New Jersey	264,412	268,175	267,738	269,024	271,000	272,034	271,413	269,303	1%	1%	2%	2%	3%	3%	2%
Bergen	35,099	35,399	35,160	35,660	35,818	36,087	35,949	35,421	1%	0%	2%	2%	3%	2%	1%
Essex	31,127	31,297	31,485	31,602	31,715	31,901	31,840	31,816	1%	1%	2%	2%	2%	2%	2%
Hudson	82,484	83,408	83,175	83,495	83,911	84,762	84,609	83,716	1%	1%	1%	2%	3%	3%	1%
Hunterdon	3,050	3,074	3,124	3,102	3,126	3,161	3,136	3,094	1%	2%	2%	2%	4%	3%	1%
Mercer	7,175	7,206	7,238	7,284	7,295	7,287	7,254	7,254	0%	1%	2%	2%	2%	1%	1%
Middlesex	28,278	28,713	28,846	28,745	29,169	28,942	29,046	28,864	2%	2%	2%	3%	2%	3%	2%
Monmouth	19,481	19,879	19,522	19,674	19,935	19,727	19,655	19,424	2%	0%	1%	2%	1%	1%	0%
Morris	10,136	10,439	10,403	10,424	10,632	10,643	10,523	10,506	3%	3%	3%	5%	5%	4%	4%
Ocean	11,322	11,429	11,451	11,495	11,564	11,506	11,538	11,497	1%	1%	2%	2%	2%	2%	2%
Passaic	8,228	8,798	8,672	8,828	9,032	9,042	8,876	8,875	7%	5%	7%	10%	10%	8%	8%
Somerset	5,977	6,159	6,124	6,223	6,198	6,298	6,259	6,146	3%	2%	4%	4%	5%	5%	3%
Sussex	3,348	3,369	3,425	3,353	3,367	3,319	3,339	3,400	1%	2%	0%	1%	-1%	0%	2%
Union	17,759	18,059	18,162	18,188	18,273	18,404	18,429	18,324	2%	2%	2%	3%	4%	4%	3%
Warren	948	946	951	951	965	955	960	966	0%	0%	0%	2%	1%	1%	2%
Connecticut	57,639	57,274	57,394	57,303	57,085	56,505	57,517	56,565	-1%	0%	-1%	-1%	-2%	0%	-2%
Fairfield	37,853	37,404	37,634	37,596	37,104	36,530	37,532	36,665	-1%	-1%	-1%	-2%	-3%	-1%	-3%
New Haven	19,786	19,870	19,760	19,707	19,981	19,975	19,985	19,900	0%	0%	0%	1%	1%	1%	1%

Table 4A.2-11. Toll Vehicle Volumes Entering/Leaving the Manhattan CBD by Screen Line/Crossing (2045)

Daily Volumes									Percent Change						
		Scenario							Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
(by Screen Line/ Crossing)															
Total	1,480,286	1,292,709	1,298,008	1,268,589	1,230,549	1,216,169	1,239,285	1,269,601	-13%	-12%	-14%	-17%	-18%	-16%	-14%
Inbound	750,695	647,822	650,479	635,851	617,517	610,279	621,900	636,184	-14%	-13%	-15%	-18%	-19%	-17%	-15.3%
Outbound	729,559	644,852	647,500	632,704	613,005	605,868	617,357	633,393	-12%	-11%	-13%	-16%	-17%	-15%	-13%
60th Street	549,072	473,220	479,431	460,828	438,623	436,372	446,477	469,509	-13.8%	-12.7%	-16.1%	-20.1%	-20.5%	-18.7%	-14.5%
Inbound	288,876	236,408	239,250	226,243	212,735	211,409	216,884	233,737	-18.2%	-17.2%	-21.7%	-26.4%	-26.8%	-24.9%	-19.1%
Outbound	260,182	236,796	240,172	234,572	225,878	224,955	229,583	235,764	-9.0%	-7.7%	-9.8%	-13.2%	-13.5%	-11.8%	-9.4%
FDR DRIVE+WEST SIDE HWY	301,343	288,193	291,892	285,093	276,703	275,597	280,729	287,393	-4.4%	-3.1%	-5.4%	-8.2%	-8.5%	-6.8%	-4.6%
West Side Highway / Route 9A	124,950	117,457	118,920	115,127	111,092	110,371	112,823	116,458	-6.0%	-4.8%	-7.9%	-11.1%	-11.7%	-9.7%	-6.8%
am	26,409	25,842	26,232	25,580	25,080	25,175	25,424	25,745	-2.1%	-0.7%	-3.1%	-5.0%	-4.7%	-3.7%	-2.5%
md	35,767	33,953	34,492	33,809	32,466	32,622	33,110	33,621	-5.1%	-3.6%	-5.5%	-9.2%	-8.8%	-7.4%	-6.0%
pm	26,791	25,949	26,143	25,589	25,067	25,072	25,363	25,797	-3.1%	-2.4%	-4.5%	-6.4%	-6.4%	-5.3%	-3.7%
nt	35,983	31,713	32,053	30,149	28,479	27,502	28,926	31,295	-11.9%	-10.9%	-16.2%	-20.9%	-23.6%	-19.6%	-13.0%
FDR Drive	176,393	170,736	172,972	169,966	165,611	165,226	167,906	170,935	-3.2%	-1.9%	-3.6%	-6.1%	-6.3%	-4.8%	-3.1%
am	35,876	35,591	35,904	35,980	35,525	35,727	35,945	35,852	-0.8%	0.1%	0.3%	-1.0%	-0.4%	0.2%	-0.1%
md	49,880	48,193	49,129	48,748	47,821	47,663	48,944	48,246	-3.4%	-1.5%	-2.3%	-4.1%	-4.4%	-1.9%	-3.3%
pm	41,521	40,448	40,849	40,091	39,071	39,406	39,737	40,247	-2.6%	-1.6%	-3.4%	-5.9%	-5.1%	-4.3%	-3.1%
nt	49,116	46,504	47,090	45,147	43,194	42,430	43,280	46,590	-5.3%	-4.1%	-8.1%	-12.1%	-13.6%	-11.9%	-5.1%
WEST AVENUES	72,502	56,201	57,660	54,867	50,856	50,545	52,999	56,491	-22.5%	-20.5%	-24.3%	-29.9%	-30.3%	-26.9%	-22.1%
West End Ave	10,141	3,914	4,226	3,391	2,516	2,424	3,024	4,322	-61.4%	-58.3%	-66.6%	-75.2%	-76.1%	-70.2%	-57.4%
am	2,742	1,163	1,248	983	767	753	841	1,336	-57.6%	-54.5%	-64.2%	-72.0%	-72.5%	-69.3%	-51.3%
md	3,007	1,210	1,294	970	777	751	962	1,380	-59.8%	-57.0%	-67.7%	-74.2%	-75.0%	-68.0%	-54.1%
pm	2,280	1,008	1,130	990	610	607	814	1,020	-55.8%	-50.4%	-56.6%	-73.2%	-73.4%	-64.3%	-55.3%
nt	2,112	533	554	448	362	313	407	586	-74.8%	-73.8%	-78.8%	-82.9%	-85.2%	-80.7%	-72.3%
Broadway	34,340	29,214	29,590	28,539	26,644	26,387	27,354	28,641	-14.9%	-13.8%	-16.9%	-22.4%	-23.2%	-20.3%	-16.6%
am	8,486	7,413	7,356	7,314	6,655	6,584	6,769	7,238	-12.6%	-13.3%	-13.8%	-21.6%	-22.4%	-20.2%	-14.7%
md	9,086	7,245	7,487	7,070	6,345	6,246	6,738	7,205	-20.3%	-17.6%	-22.2%	-30.2%	-31.3%	-25.8%	-20.7%
pm	10,649	9,199	9,342	9,026	8,618	8,631	8,617	9,088	-13.6%	-12.3%	-15.2%	-19.1%	-19.0%	-19.1%	-14.7%
nt	6,119	5,357	5,405	5,129	5,026	4,926	5,230	5,110	-12.5%	-11.7%	-16.2%	-17.9%	-19.5%	-14.5%	-16.5%
Amsterdam	13,296	8,508	8,776	8,388	7,821	7,614	8,283	8,730	-36.0%	-34.0%	-36.9%	-41.2%	-42.7%	-37.7%	-34.3%
am	1,825	1,107	1,082	970	898	870	909	1,210	-39.3%	-40.7%	-46.8%	-50.8%	-52.3%	-50.2%	-33.7%
md	3,528	2,091	2,084	1,957	1,745	1,740	1,871	2,213	-40.7%	-40.9%	-44.5%	-50.5%	-50.7%	-47.0%	-37.3%
pm	6,075	4,241	4,587	4,265	3,860	3,814	4,185	4,193	-30.2%	-24.5%	-29.8%	-36.5%	-37.2%	-31.1%	-31.0%
nt	1,868	1,069	1,023	1,196	1,318	1,190	1,318	1,114	-42.8%	-45.2%	-36.0%	-29.4%	-36.3%	-29.4%	-40.4%
Columbus Ave	10,785	10,941	11,335	10,628	10,040	10,246	10,362	11,120	1.4%	5.1%	-1.5%	-6.9%	-5.0%	-3.9%	3.1%
am	3,422	3,297	3,412	3,262	3,025	3,091	3,183	3,316	-3.7%	-0.3%	-4.7%	-11.6%	-9.7%	-7.0%	-3.1%
md	3,964	3,742	3,950	3,617	3,452	3,601	3,518	3,806	-5.6%	-0.4%	-8.8%	-12.9%	-9.2%	-11.3%	-4.0%
pm	1,968	1,979	2,017	1,840	1,766	1,786	1,859	1,953	0.6%	2.5%	-6.5%	-10.3%	-9.2%	-5.5%	-0.8%
nt	1,431	1,923	1,956	1,909	1,797	1,768	1,802	2,045	34.4%	36.7%	33.4%	25.6%	23.5%	25.9%	42.9%
Eighth Avenue	3,940	3,624	3,733	3,921	3,835	3,874	3,976	3,678	-8.0%	-5.3%	-0.5%	-2.7%	-1.7%	0.9%	-6.6%
am	693	697	713	748	878	879	863	652	0.6%	2.9%	7.9%	26.7%	26.8%	24.5%	-5.9%
md	960	858	853	884	853	881	902	861	-10.6%	-11.1%	-7.9%	-11.1%	-8.2%	-6.0%	-10.3%
pm	1,468	1,248	1,314	1,365	1,235	1,236	1,277	1,292	-15.0%	-10.5%	-7.0%	-15.9%	-15.8%	-13.0%	-12.0%
nt	819	821	853	924	869	878	934	873	0.2%	4.2%	12.8%	6.1%	7.2%	14.0%	6.6%

Daily Volumes									Percent Change						
Scenario	No Action	Scenario							Scenario						
		A	B	C	D	E	F	G	A	B	C	D	E	F	G
(by Screen Line/ Crossing)															
EAST AVENUES	175,227	128,826	129,879	120,868	111,064	110,230	112,749	125,625	-26.5%	-25.9%	-31.0%	-36.6%	-37.1%	-35.7%	-28.3%
Fifth Avenue	13,688	10,357	10,635	9,866	9,084	8,954	9,305	10,313	-24.3%	-22.3%	-27.9%	-33.6%	-34.6%	-32.0%	-24.7%
am	4,262	3,688	3,718	3,606	3,340	3,250	3,382	3,603	-13.5%	-12.8%	-15.4%	-21.6%	-23.7%	-20.6%	-15.5%
md	5,324	3,600	3,749	3,492	3,075	3,091	3,237	3,668	-32.4%	-29.6%	-34.4%	-42.2%	-41.9%	-39.2%	-31.1%
pm	2,178	1,638	1,715	1,546	1,547	1,565	1,565	1,644	-24.8%	-21.3%	-29.0%	-29.0%	-28.1%	-28.1%	-24.5%
nt	1,924	1,431	1,453	1,222	1,122	1,048	1,121	1,398	-25.6%	-24.5%	-36.5%	-41.7%	-45.5%	-41.7%	-27.3%
Madison Avenue	4,135	3,557	3,673	3,532	3,361	3,329	3,451	3,574	-14.0%	-11.2%	-14.6%	-18.7%	-19.5%	-16.5%	-13.6%
am	504	478	483	475	467	466	471	473	-5.2%	-4.2%	-5.8%	-7.3%	-7.5%	-6.5%	-6.2%
md	933	894	888	878	882	876	877	881	-4.2%	-4.8%	-5.9%	-5.5%	-6.1%	-6.0%	-5.6%
pm	2,424	1,990	2,110	1,990	1,835	1,776	1,906	2,039	-17.9%	-13.0%	-17.9%	-24.3%	-26.7%	-21.4%	-15.9%
nt	274	195	192	189	177	211	197	181	-28.8%	-29.9%	-31.0%	-35.4%	-23.0%	-28.1%	-33.9%
Park Avenue	19,120	15,565	15,774	15,288	14,537	13,927	14,552	15,240	-18.6%	-17.5%	-20.0%	-24.0%	-27.2%	-23.9%	-20.3%
am	5,447	4,692	4,776	4,636	4,339	4,212	4,363	4,589	-13.9%	-12.3%	-14.9%	-20.3%	-22.7%	-19.9%	-15.8%
md	5,082	3,833	3,820	3,666	3,475	3,403	3,500	3,724	-24.6%	-24.8%	-27.9%	-31.6%	-33.0%	-31.1%	-26.7%
pm	5,339	4,419	4,465	4,384	4,323	4,085	4,172	4,322	-17.2%	-16.4%	-17.9%	-19.0%	-23.5%	-21.9%	-19.0%
nt	3,252	2,621	2,713	2,602	2,400	2,227	2,517	2,605	-19.4%	-16.6%	-20.0%	-26.2%	-31.5%	-22.6%	-19.9%
Lexington Avenue	12,954	9,343	9,394	8,438	7,528	7,611	7,613	9,448	-27.9%	-27.5%	-34.9%	-41.9%	-41.2%	-41.2%	-27.1%
am	4,078	2,531	2,615	2,444	2,237	2,173	2,294	2,566	-37.9%	-35.9%	-40.1%	-45.1%	-46.7%	-43.7%	-37.1%
md	4,945	4,249	4,113	3,683	3,003	3,158	2,998	4,397	-14.1%	-16.8%	-25.5%	-39.3%	-36.1%	-39.4%	-11.1%
pm	1,830	1,167	1,258	1,147	1,159	1,186	1,203	1,160	-36.2%	-31.3%	-37.3%	-36.7%	-35.2%	-34.3%	-36.6%
nt	2,101	1,396	1,408	1,164	1,129	1,094	1,118	1,325	-33.6%	-33.0%	-44.6%	-46.3%	-47.9%	-46.8%	-36.9%
Third Avenue	14,732	11,117	11,374	10,467	8,672	8,892	8,798	10,586	-24.5%	-22.8%	-29.0%	-41.1%	-39.6%	-40.3%	-28.1%
am	2,657	2,016	2,037	1,929	1,764	1,815	1,770	1,833	-24.1%	-23.3%	-27.4%	-33.6%	-31.7%	-33.4%	-31.0%
md	4,589	3,792	3,998	3,547	2,671	2,707	2,729	3,790	-17.4%	-12.9%	-22.7%	-41.8%	-41.0%	-40.5%	-17.4%
pm	5,105	3,847	3,867	3,545	2,998	3,072	3,015	3,547	-24.6%	-24.3%	-30.6%	-41.3%	-39.8%	-40.9%	-30.5%
nt	2,381	1,462	1,472	1,446	1,239	1,298	1,284	1,416	-38.6%	-38.2%	-39.3%	-48.0%	-45.5%	-46.1%	-40.5%
Second Avenue	40,494	21,084	20,913	18,165	15,893	15,843	16,747	18,875	-47.9%	-48.4%	-55.1%	-60.8%	-60.9%	-58.6%	-53.4%
am	9,631	6,535	6,568	6,140	5,685	5,698	5,921	5,890	-32.1%	-31.8%	-36.2%	-41.0%	-40.8%	-38.5%	-38.8%
md	11,156	6,460	6,568	5,419	4,417	4,545	4,685	6,186	-42.1%	-41.1%	-51.4%	-60.4%	-59.3%	-58.0%	-44.6%
pm	9,085	4,499	4,453	4,012	3,615	3,620	3,747	4,194	-50.5%	-51.0%	-55.8%	-60.2%	-60.2%	-58.8%	-53.8%
nt	10,622	3,590	3,324	2,594	2,176	1,980	2,394	2,605	-66.2%	-68.7%	-75.6%	-79.5%	-81.4%	-77.5%	-75.5%
First Avenue	6,164	5,765	6,078	5,871	5,663	5,308	5,736	5,937	-6.5%	-1.4%	-4.8%	-8.1%	-13.9%	-6.9%	-3.7%
am	2,202	1,993	2,014	1,952	1,867	1,844	1,911	1,987	-9.5%	-8.5%	-11.4%	-15.2%	-16.3%	-13.2%	-9.8%
md	1,430	1,601	1,640	1,585	1,564	1,496	1,561	1,640	12.0%	14.7%	10.8%	9.4%	4.6%	9.2%	14.7%
pm	1,755	1,488	1,774	1,733	1,641	1,417	1,635	1,622	-15.2%	1.1%	-1.3%	-6.5%	-19.3%	-6.8%	-7.6%
nt	777	683	650	601	591	551	629	688	-12.1%	-16.3%	-22.7%	-23.9%	-29.1%	-19.0%	-11.5%
York Avenue	23,130	14,003	13,978	13,323	11,794	12,032	12,062	13,801	-39.5%	-39.6%	-42.4%	-49.0%	-48.0%	-47.9%	-40.3%
am	4,535	2,600	2,627	2,392	2,200	2,157	2,098	2,448	-42.7%	-42.1%	-47.3%	-51.5%	-52.4%	-53.7%	-46.0%
md	7,308	4,514	4,721	4,475	3,785	3,805	4,073	4,507	-38.2%	-35.4%	-38.8%	-48.2%	-47.9%	-44.3%	-38.3%
pm	4,177	2,440	2,269	2,018	1,855	1,999	1,915	2,474	-41.6%	-45.7%	-51.7%	-55.6%	-52.1%	-54.2%	-40.8%
nt	7,110	4,449	4,361	4,438	3,954	4,071	3,976	4,372	-37.4%	-38.7%	-37.6%	-44.4%	-42.7%	-44.1%	-38.5%
Ed Koch Queensboro Ramp	40,810	38,035	38,060	35,918	34,532	34,334	34,485	37,851	-6.8%	-6.7%	-12.0%	-15.4%	-15.9%	-15.5%	-7.3%
am	8,172	6,250	6,294	6,108	6,041	5,972	6,002	6,237	-23.5%	-23.0%	-25.3%	-26.1%	-26.9%	-26.6%	-23.7%
md	15,526	13,262	13,453	12,756	11,677	11,523	11,669	13,353	-14.6%	-13.4%	-17.8%	-24.8%	-25.8%	-24.8%	-14.0%
pm	8,411	6,202	6,105	5,628	5,493	5,540	5,655	6,103	-26.3%	-27.4%	-33.1%	-34.7%	-34.1%	-32.8%	-27.4%
nt	8,701	12,321	12,208	11,426	11,321	11,299	11,159	12,158	41.6%	40.3%	31.3%	30.1%	29.9%	28.2%	39.7%
Queens	291,091	253,735	252,884	253,353	254,874	253,653	255,827	248,183	-12.8%	-13.1%	-13.0%	-12.4%	-12.9%	-12.1%	-14.7%
Inbound	154,348	138,824	138,730	142,997	147,894	147,558	148,430	136,884	-10.1%	-10.1%	-7.4%	-4.2%	-4.4%	-3.8%	-11.3%

Appendix 4A.2, Transportation: Travel Forecast Tolling Scenario Summaries and Detailed Tables (2023 and 2045)

Daily Volumes									Percent Change						
		Scenario							Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
(by Screen Line/ Crossing)															
Outbound	136,738	114,904	114,147	110,352	106,975	106,091	107,391	111,295	-16.0%	-16.5%	-19.3%	-21.8%	-22.4%	-21.5%	-18.6%
Ed Koch Queensboro Bridge	197,846	166,725	165,822	148,303	141,166	139,726	140,873	161,957	-15.7%	-16.2%	-25.0%	-28.6%	-29.4%	-28.8%	-18.1%
am	42,221	36,712	36,676	33,980	32,041	31,626	31,820	35,481	-13.0%	-13.1%	-19.5%	-24.1%	-25.1%	-24.6%	-16.0%
md	62,631	52,936	53,021	50,245	47,626	47,231	47,633	51,650	-15.5%	-15.3%	-19.8%	-24.0%	-24.6%	-23.9%	-17.5%
pm	42,940	34,959	34,766	31,385	30,046	29,768	30,328	34,205	-18.6%	-19.0%	-26.9%	-30.0%	-30.7%	-29.4%	-20.3%
nt	50,054	42,118	41,359	32,693	31,453	31,101	31,092	40,621	-15.9%	-17.4%	-34.7%	-37.2%	-37.9%	-37.9%	-18.8%
Queens-Midtown Tunnel	93,245	87,010	87,062	105,050	113,708	113,927	114,954	86,226	-6.7%	-6.6%	12.7%	21.9%	22.2%	23.3%	-7.5%
am	21,318	20,294	20,323	22,461	24,206	24,031	24,399	20,241	-4.8%	-4.7%	5.4%	13.5%	12.7%	14.5%	-5.1%
md	32,800	30,994	31,149	33,041	34,751	34,679	35,178	30,774	-5.5%	-5.0%	0.7%	5.9%	5.7%	7.3%	-6.2%
pm	22,094	20,087	20,082	23,055	24,200	24,066	24,167	19,888	-9.1%	-9.1%	4.3%	9.5%	8.9%	9.4%	-10.0%
nt	17,033	15,635	15,508	26,493	30,551	31,151	31,210	15,323	-8.2%	-9.0%	55.5%	79.4%	82.9%	83.2%	-10.0%
Brooklyn	408,468	365,716	367,350	351,031	330,025	325,233	330,740	358,827	-10.5%	-10.1%	-14.1%	-19.2%	-20.4%	-19.0%	-12.2%
Inbound	192,604	172,530	173,247	159,307	143,498	141,693	143,711	169,120	-10.4%	-10.1%	-17.3%	-25.5%	-26.4%	-25.4%	-12.2%
Outbound	215,854	193,179	194,093	191,710	186,518	183,531	187,019	189,699	-10.5%	-10.1%	-11.2%	-13.6%	-15.0%	-13.4%	-12.1%
Williamsburg Bridge	133,193	111,152	111,231	103,933	93,227	91,002	93,740	108,000	-16.5%	-16.5%	-22.0%	-30.0%	-31.7%	-29.6%	-18.9%
am	28,657	23,603	23,402	22,828	21,703	21,184	21,445	23,086	-17.6%	-18.3%	-20.3%	-24.3%	-26.1%	-25.2%	-19.4%
md	37,751	31,457	31,715	30,384	28,285	27,954	28,793	30,496	-16.7%	-16.0%	-19.5%	-25.1%	-26.0%	-23.7%	-19.2%
pm	32,592	28,375	28,569	27,062	24,497	24,023	24,458	27,939	-12.9%	-12.3%	-17.0%	-24.8%	-26.3%	-25.0%	-14.3%
nt	34,193	27,717	27,545	23,659	18,742	17,841	19,044	26,479	-18.9%	-19.4%	-30.8%	-45.2%	-47.8%	-44.3%	-22.6%
Manhattan Bridge	89,149	69,587	69,972	57,934	44,967	42,409	44,757	67,431	-21.9%	-21.5%	-35.0%	-49.6%	-52.4%	-49.8%	-24.4%
am	24,240	19,181	19,463	16,306	12,866	12,271	12,375	18,619	-20.9%	-19.7%	-32.7%	-46.9%	-49.4%	-48.9%	-23.2%
md	24,873	20,349	20,465	17,550	12,633	12,068	13,529	19,843	-18.2%	-17.7%	-29.4%	-49.2%	-51.5%	-45.6%	-20.2%
pm	21,682	16,501	16,605	13,896	10,852	10,144	10,448	15,847	-23.9%	-23.4%	-35.9%	-49.9%	-53.2%	-51.8%	-26.9%
nt	18,354	13,556	13,439	10,182	8,616	7,926	8,405	13,122	-26.1%	-26.8%	-44.5%	-53.1%	-56.8%	-54.2%	-28.5%
Brooklyn Bridge	123,306	120,792	121,064	115,635	109,739	109,409	109,590	120,164	-2.0%	-1.8%	-6.2%	-11.0%	-11.3%	-11.1%	-2.5%
am	26,213	25,670	25,654	24,973	24,514	24,414	24,590	25,498	-2.1%	-2.1%	-4.7%	-6.5%	-6.9%	-6.2%	-2.7%
md	34,357	33,511	33,801	32,465	31,177	31,323	31,190	33,385	-2.5%	-1.6%	-5.5%	-9.3%	-8.8%	-9.2%	-2.8%
pm	27,393	26,147	26,223	25,070	24,595	24,477	24,521	26,020	-4.5%	-4.3%	-8.5%	-10.2%	-10.6%	-10.5%	-5.0%
nt	35,343	35,464	35,386	33,127	29,453	29,195	29,289	35,261	0.3%	0.1%	-6.3%	-16.7%	-17.4%	-17.1%	-0.2%
Hugh Carey Tunnel	62,820	64,185	65,083	73,529	82,092	82,413	82,653	63,232	2.2%	3.6%	17.0%	30.7%	31.2%	31.6%	0.7%
am	17,654	18,302	18,449	19,366	20,680	20,680	20,734	18,011	3.7%	4.5%	9.7%	17.1%	17.1%	17.4%	2.0%
md	20,946	20,546	20,963	22,234	24,001	24,044	24,374	20,168	-1.9%	0.1%	6.1%	14.6%	14.8%	16.4%	-3.7%
pm	19,208	19,230	19,455	21,136	22,606	22,545	22,662	18,859	0.1%	1.3%	10.0%	17.7%	17.4%	18.0%	-1.8%
nt	5,012	6,107	6,216	10,793	14,805	15,144	14,883	6,194	21.8%	24.0%	115.3%	195.4%	202.2%	196.9%	23.6%
New Jersey	231,655	200,038	198,343	203,377	207,027	200,911	206,241	193,082	-13.6%	-14.4%	-12.2%	-10.6%	-13.3%	-11.0%	-16.7%
Inbound	114,867	100,060	99,252	107,304	113,390	109,619	112,875	96,443	-12.9%	-13.6%	-6.6%	-1.3%	-4.6%	-1.7%	-16.0%
Outbound	116,785	99,973	99,088	96,070	93,634	91,291	93,364	96,635	-14.4%	-15.2%	-17.7%	-19.8%	-21.8%	-20.1%	-17.3%
Holland Tunnel	112,293	98,676	97,801	98,923	97,997	95,322	97,637	94,418	-12.1%	-12.9%	-11.9%	-12.7%	-15.1%	-13.1%	-15.9%
am	24,403	22,357	22,225	22,221	22,072	21,685	21,709	21,681	-8.4%	-8.9%	-8.9%	-9.6%	-11.1%	-11.0%	-11.2%
md	30,664	26,921	26,656	26,726	26,521	25,498	26,919	26,141	-12.2%	-13.1%	-12.8%	-13.5%	-16.8%	-12.2%	-14.8%
pm	24,319	21,872	21,729	21,790	21,856	21,047	21,114	21,160	-10.1%	-10.7%	-10.4%	-10.1%	-13.5%	-13.2%	-13.0%
nt	32,907	27,526	27,191	28,186	27,548	27,092	27,895	25,436	-16.4%	-17.4%	-14.3%	-16.3%	-17.7%	-15.2%	-22.7%
Lincoln Tunnel	119,362	101,362	100,542	104,454	109,030	105,589	108,604	98,664	-15.1%	-15.8%	-12.5%	-8.7%	-11.5%	-9.0%	-17.3%
am	25,320	23,616	23,552	24,101	24,429	24,076	23,987	23,045	-6.7%	-7.0%	-4.8%	-3.5%	-4.9%	-5.3%	-9.0%
md	35,984	30,238	29,793	30,254	30,590	29,902	31,337	29,419	-16.0%	-17.2%	-15.9%	-15.0%	-16.9%	-12.9%	-18.2%
pm	26,762	23,685	23,679	23,597	23,506	22,830	22,925	23,049	-11.5%	-11.5%	-11.8%	-12.2%	-14.7%	-14.3%	-13.9%
nt	31,296	23,823	23,518	26,502	30,505	28,781	30,355	23,151	-23.9%	-24.9%	-15.3%	-2.5%	-8.0%	-3.0%	-26.0%

Table 4A.2-12. Summary – Vehicle-Miles Traveled (2045)

	Daily VMT								Percent Change						
		Scenario							Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
(by Screen Line/ Crossing)															
Manhattan CBD	3,402,711	3,173,972	3,199,881	3,156,249	3,117,142	3,106,570	3,147,541	3,144,017	-6.7%	-6.0%	-7.2%	-8.4%	-8.7%	-7.5%	-7.6%
New York City	49,748,914	49,306,506	49,361,708	49,206,260	48,917,855	48,908,967	49,014,661	49,271,140	-0.9%	-0.8%	-1.1%	-1.7%	-1.7%	-1.5%	-1.0%
Manhattan CBD	3,402,711	3,173,972	3,199,881	3,156,249	3,117,142	3,106,570	3,147,541	3,144,017	-6.7%	-6.0%	-7.2%	-8.4%	-8.7%	-7.5%	-7.6%
CBD Core	1,262,019	1,211,069	1,219,101	1,222,077	1,236,236	1,230,340	1,246,015	1,197,152	-4.0%	-3.4%	-3.2%	-2.0%	-2.5%	-1.3%	-5.1%
Peripheral Highways (south of 60th Street; excluded from the toll)	2,140,692	1,962,903	1,980,780	1,934,172	1,880,906	1,876,230	1,901,526	1,946,865	-8.3%	-7.5%	-9.6%	-12.1%	-12.4%	-11.2%	-9.1%
RT9A - S of 60th	647,671	554,316	562,018	528,271	500,214	499,855	509,900	550,459	-14.4%	-13.2%	-18.4%	-22.8%	-22.8%	-21.3%	-15.0%
FDR - S of 60th	758,659	760,056	770,395	754,497	733,879	739,383	743,921	763,263	0.2%	1.5%	-0.5%	-3.3%	-2.5%	-1.9%	0.6%
Bridge & Tunnels - S of 60th*	734,362	648,531	648,367	651,404	646,813	636,992	647,705	633,143	-11.7%	-11.7%	-11.3%	-11.9%	-13.3%	-11.8%	-13.8%
Zone 1	2,349,929	2,195,311	2,199,825	2,155,278	2,113,309	2,104,806	2,123,309	2,173,895	-6.6%	-6.4%	-8.3%	-10.1%	-10.4%	-9.6%	-7.5%
Manhattan: 60th St - 82nd St	691,669	619,654	625,994	609,607	588,882	587,032	597,706	615,867	-10.4%	-9.5%	-11.9%	-14.9%	-15.1%	-13.6%	-11.0%
Long Island City	700,142	652,642	650,449	648,608	652,055	649,766	653,025	642,138	-6.8%	-7.1%	-7.4%	-6.9%	-7.2%	-6.7%	-8.3%
Downtown Brooklyn	530,763	515,559	515,095	495,020	479,948	477,863	479,718	511,255	-2.9%	-3.0%	-6.7%	-9.6%	-10.0%	-9.6%	-3.7%
Williamsburg	427,355	407,456	408,287	402,043	392,424	390,145	392,860	404,635	-4.7%	-4.5%	-5.9%	-8.2%	-8.7%	-8.1%	-5.3%
Zone 2	7,142,863	7,086,769	7,098,540	7,060,838	7,013,071	7,012,113	7,032,663	7,083,658	-0.8%	-0.6%	-1.1%	-1.8%	-1.8%	-1.5%	-0.8%
Manhattan: 82nd St - 126th St	1,812,034	1,776,710	1,791,117	1,769,374	1,739,044	1,735,671	1,749,819	1,786,850	-1.9%	-1.2%	-2.4%	-4.0%	-4.2%	-3.4%	-1.4%
Inner Brooklyn	2,542,834	2,523,392	2,524,419	2,502,611	2,492,284	2,490,072	2,492,966	2,511,791	-0.8%	-0.7%	-1.6%	-2.0%	-2.1%	-2.0%	-1.2%
Inner Queens	2,787,995	2,786,667	2,783,004	2,788,853	2,781,743	2,786,370	2,789,878	2,785,017	0.0%	-0.2%	0.0%	-0.2%	-0.1%	0.1%	-0.1%
Zone 3	36,853,411	36,850,454	36,863,462	36,833,895	36,674,333	36,685,478	36,711,148	36,869,570	0.0%	0.0%	-0.1%	-0.5%	-0.5%	-0.4%	0.0%
Upper Manhattan: Above 126th St	1,809,655	1,803,988	1,807,284	1,789,372	1,763,748	1,755,041	1,767,328	1,806,866	-0.3%	-0.1%	-1.1%	-2.5%	-3.0%	-2.3%	-0.2%
Outer Brooklyn	6,926,352	6,930,342	6,934,043	6,925,110	6,896,220	6,900,201	6,894,299	6,923,525	0.1%	0.1%	0.0%	-0.4%	-0.4%	-0.5%	0.0%
Outer Queens	15,879,972	15,790,320	15,792,442	15,789,011	15,733,285	15,740,134	15,760,898	15,782,430	-0.6%	-0.6%	-0.6%	-0.9%	-0.9%	-0.7%	-0.6%
Staten Island	4,158,480	4,235,660	4,234,612	4,246,527	4,227,463	4,242,170	4,224,254	4,252,251	1.9%	1.8%	2.1%	1.7%	2.0%	1.6%	2.3%
Bronx	8,078,952	8,090,144	8,095,081	8,083,875	8,053,617	8,047,932	8,064,369	8,104,498	0.1%	0.2%	0.1%	-0.3%	-0.4%	-0.2%	0.3%
New York State	134,186,361	133,549,102	133,603,123	133,407,441	133,011,541	132,941,187	133,056,675	133,576,575	-0.5%	-0.4%	-0.6%	-0.9%	-0.9%	-0.8%	-0.5%
New York City	49,748,914	49,306,506	49,361,708	49,206,260	48,917,855	48,908,967	49,014,661	49,271,140	-0.9%	-0.8%	-1.1%	-1.7%	-1.7%	-1.5%	-1.0%
Long Island	46,813,526	46,752,292	46,709,696	46,716,462	46,732,209	46,699,238	46,688,529	46,757,385	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	-0.3%	-0.1%
Upstate	37,623,921	37,490,304	37,531,719	37,484,719	37,361,477	37,332,982	37,353,485	37,548,050	-0.4%	-0.2%	-0.4%	-0.7%	-0.8%	-0.7%	-0.2%
Connecticut	35,063,470	35,045,234	35,006,855	35,042,347	35,004,182	35,002,445	34,998,648	35,059,459	-0.1%	-0.2%	-0.1%	-0.2%	-0.2%	-0.2%	0.0%
New Jersey	107,907,842	107,914,688	107,948,940	108,040,676	107,970,946	107,950,075	108,024,196	107,882,082	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%
Total	277,157,673	276,509,024	276,558,918	276,490,464	275,986,669	275,893,707	276,079,519	276,518,116	-0.2%	-0.2%	-0.2%	-0.4%	-0.5%	-0.4%	-0.2%

Table 4A.2-13. Transit Boardings by Mode (2045)

Mode	Transit Boardings (AM Period)															Change					Percent Change						
	Scenario								Scenario							Scenario											
	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G					
Total Volume	7,101,708	7,191,188	7,182,951	7,197,443	7,216,330	7,225,106	7,219,657	7,191,067	89,480	81,243	95,736	114,623	123,398	117,950	89,359	1.3%	1.1%	1.3%	1.6%	1.7%	1.7%	1.3%					
Commuter Rail	566,907	571,260	571,647	572,767	575,243	575,759	575,844	571,840	4,353	4,740	5,859	8,336	8,852	8,937	4,932	0.8%	0.8%	1.0%	1.5%	1.6%	1.6%	0.9%					
Long Island Rail Road	182,379	183,350	183,968	183,855	184,739	184,062	184,856	183,867	971	1,589	1,476	2,360	1,684	2,477	1,488	0.5%	0.9%	0.8%	1.3%	0.9%	1.4%	0.8%					
Metro-North Railroad	206,505	208,301	208,346	208,583	209,623	210,064	210,407	208,441	1,796	1,841	2,079	3,118	3,559	3,902	1,936	0.9%	0.9%	1.0%	1.5%	1.7%	1.9%	0.9%					
New Jersey Transit Rail	178,024	179,609	179,334	180,329	180,881	181,634	180,582	179,532	1,585	1,310	2,305	2,857	3,610	2,558	1,508	0.9%	0.7%	1.3%	1.6%	2.0%	1.4%	0.8%					
Urban Rail	3,517,783	3,569,779	3,566,213	3,572,869	3,582,744	3,589,853	3,585,948	3,571,053	51,996	48,429	55,086	64,961	72,069	68,164	53,270	1.5%	1.4%	1.6%	1.8%	2.0%	1.9%	1.5%					
NYCT Subway	3,344,746	3,394,538	3,390,882	3,397,112	3,406,542	3,413,503	3,409,708	3,395,715	49,792	46,137	52,366	61,796	68,757	64,962	50,969	1.5%	1.4%	1.6%	1.8%	2.1%	1.9%	1.5%					
PATH	160,294	161,896	162,044	162,348	162,744	162,808	162,830	162,030	1,601	1,750	2,054	2,450	2,514	2,536	1,736	1.0%	1.1%	1.3%	1.5%	1.6%	1.6%	1.1%					
SIRR	12,743	13,346	13,286	13,410	13,459	13,541	13,409	13,308	603	543	667	715	798	666	565	4.7%	4.3%	5.2%	5.6%	6.3%	5.2%	4.4%					
Bus	2,958,355	2,990,052	2,985,085	2,991,551	2,997,749	2,998,714	2,997,421	2,988,399	31,697	26,730	33,197	39,395	40,359	39,066	30,044	1.1%	0.9%	1.1%	1.3%	1.4%	1.3%	1.0%					
NYCT Bus	2,182,751	2,209,043	2,206,110	2,211,296	2,215,888	2,217,583	2,214,448	2,210,288	26,292	23,358	28,544	33,136	34,831	31,697	27,537	1.2%	1.1%	1.3%	1.5%	1.6%	1.5%	1.3%					
NJT Bus	562,497	567,619	566,723	567,631	567,841	568,634	569,748	566,447	5,122	4,225	5,134	5,344	6,137	7,251	3,950	0.9%	0.8%	0.9%	1.0%	1.1%	1.3%	0.7%					
Others	213,106	213,389	212,253	212,625	214,021	212,497	213,224	211,664	283	-853	-481	915	-609	118	-1,442	0.1%	-0.4%	-0.2%	0.4%	-0.3%	0.1%	-0.7%					
Other Transit	58,663	60,097	60,006	60,256	60,594	60,780	60,444	59,775	1,435	1,343	1,594	1,931	2,117	1,782	1,113	2.4%	2.3%	2.7%	3.3%	3.6%	3.0%	1.9%					
Ferries	58,663	60,097	60,006	60,256	60,594	60,780	60,444	59,775	1,435	1,343	1,594	1,931	2,117	1,782	1,113	2.4%	2.3%	2.7%	3.3%	3.6%	3.0%	1.9%					
Roosevelt Tram	195	202	201	202	203	204	204	206	6	6	7	7	9	9	10	3.3%	2.9%	3.4%	3.8%	4.8%	4.5%	5.4%					

Table 4A.2-14. Cordon Volumes by Station/Route (2045)

Cordon Volumes (AM Peak Period)																	Percent Change						
		Scenario							Scenario							Scenario							
	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G	
Commuter Rail																							
Inbound	309,638	313,033	312,689	313,316	315,353	315,608	314,947	313,359	3,395	3,051	3,678	5,715	5,970	5,308	3,721	1.1%	1.0%	1.2%	1.8%	1.9%	1.7%	1.2%	
Long Island Rail Road (Penn Station)	72,372	73,202	73,362	73,243	73,570	73,493	73,654	73,388	830	990	872	1,199	1,121	1,283	1,016	1.1%	1.4%	1.2%	1.7%	1.5%	1.8%	1.4%	
Long Island Rail Road (Grand Central Terminal)	52,023	52,204	52,376	52,304	52,551	52,449	52,744	52,422	181	353	281	528	426	721	399	0.3%	0.7%	0.5%	1.0%	0.8%	1.4%	0.8%	
Metro-North Railroad (Grand Central Terminal)	100,383	101,948	101,587	101,784	102,959	103,271	102,611	101,627	1,565	1,204	1,401	2,576	2,888	2,228	1,245	1.6%	1.2%	1.4%	2.6%	2.9%	2.2%	1.2%	
Metro-North Railroad (Penn Station)	22,907	23,102	22,922	23,288	23,302	23,299	23,278	23,296	195	14	381	394	391	370	388	0.9%	0.1%	1.7%	1.7%	1.7%	1.6%	1.7%	
New Jersey Transit (New York - Penn Station)	61,953	62,577	62,442	62,696	62,972	63,097	62,660	62,626	624	489	743	1,018	1,144	707	673	1.0%	0.8%	1.2%	1.6%	1.8%	1.1%	1.1%	
Scenario		A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G	
NYCT Subway																							
Inbound	900,899	913,149	912,186	914,960	918,589	921,066	919,986	913,556	12,250	11,287	14,061	17,690	20,166	19,086	12,657	1.4%	1.3%	1.6%	2.0%	2.2%	2.1%	1.4%	
60th Street Cordon	311,854	315,733	315,406	315,712	317,561	318,083	317,253	315,867	3,879	3,553	3,858	5,708	6,229	5,400	4,014	1.2%	1.1%	1.2%	1.8%	2.0%	1.7%	1.3%	
Broadway (1,2,3)	77,497	78,349	78,356	78,328	78,800	78,943	78,727	78,407	853	860	832	1,303	1,446	1,231	910	1.1%	1.1%	1.1%	1.7%	1.9%	1.6%	1.2%	
8th Avenue (A, C, B, D)	93,471	94,274	94,262	94,396	94,818	94,810	94,710	94,165	803	791	925	1,347	1,339	1,239	694	0.9%	0.8%	1.0%	1.4%	1.4%	1.3%	0.7%	
Lexington Avenue (4, 5, 6)	69,415	70,708	70,455	70,606	70,967	71,251	70,951	70,680	1,294	1,040	1,191	1,553	1,836	1,536	1,266	1.9%	1.5%	1.7%	2.2%	2.6%	2.2%	1.8%	
2nd Avenue (Q)	71,471	72,401	72,333	72,381	72,977	73,079	72,865	72,615	930	861	910	1,505	1,608	1,394	1,144	1.3%	1.2%	1.3%	2.1%	2.2%	2.0%	1.6%	
Queens Cordon	216,444	219,084	218,732	219,880	220,478	221,276	221,502	218,757	2,639	2,288	3,436	4,033	4,832	5,058	2,313	1.2%	1.1%	1.6%	1.9%	2.2%	2.3%	1.1%	
63rd Street (F)	51,020	51,428	51,545	51,757	51,778	51,913	52,072	51,535	408	525	737	758	893	1,052	515	0.8%	1.0%	1.4%	1.5%	1.7%	2.1%	1.0%	
60th Street (R)	12,902	13,201	13,130	13,166	13,232	13,299	13,308	13,120	299	229	264	331	398	407	218	2.3%	1.8%	2.0%	2.6%	3.1%	3.2%	1.7%	
60th Street (N, W)	28,709	29,302	29,273	29,335	29,478	29,557	29,612	29,243	593	564	626	769	848	903	534	2.1%	2.0%	2.2%	2.7%	3.0%	3.1%	1.9%	
53rd Street (E, M)	60,056	60,820	60,652	61,069	61,387	61,587	61,494	60,770	764	595	1,013	1,330	1,531	1,438	713	1.3%	1.0%	1.7%	2.2%	2.5%	2.4%	1.2%	
Steinway Tunnel (7)	63,757	64,332	64,132	64,553	64,603	64,920	65,015	64,090	575	374	796	845	1,163	1,258	332	0.9%	0.6%	1.2%	1.3%	1.8%	2.0%	0.5%	
Brooklyn Cordon	372,601	378,333	378,048	379,369	380,550	381,707	381,230	378,932	5,732	5,446	6,767	7,949	9,105	8,629	6,330	1.5%	1.5%	1.8%	2.1%	2.4%	2.3%	1.7%	
14th Street (L)	49,801	50,573	50,580	50,776	50,834	51,051	50,906	50,664	772	779	975	1,033	1,250	1,104	863	1.6%	1.6%	2.0%	2.1%	2.5%	2.2%	1.7%	
Williamsburg Bridge (J, M, Z)	35,369	36,215	36,279	36,266	36,439	36,558	36,471	36,161	847	910	897	1,070	1,189	1,102	792	2.4%	2.6%	2.5%	3.0%	3.4%	3.1%	2.2%	
Rutgers Street (F)	41,591	42,114	42,088	42,190	42,328	42,426	42,318	42,162	522	497	598	737	834	727	571	1.3%	1.2%	1.4%	1.8%	2.0%	1.7%	1.4%	
Manhattan Bridge (B, D, N, Q)	107,696	109,253	109,141	109,823	110,234	110,557	110,340	109,597	1,557	1,445	2,127	2,538	2,861	2,643	1,901	1.4%	1.3%	2.0%	2.4%	2.7%	2.5%	1.8%	
Cranberry Street (A, C)	71,587	72,583	72,481	72,701	72,852	73,038	72,947	72,610	995	894	1,114	1,265	1,450	1,360	1,023	1.4%	1.2%	1.6%	1.8%	2.0%	1.9%	1.4%	
Clark Street (2, 3)	29,111	29,626	29,539	29,553	29,717	29,754	29,915	29,636	515	428	442	606	643	804	525	1.8%	1.5%	1.5%	2.1%	2.2%	2.8%	1.8%	
Montague Street (R)	11,089	11,148	11,163	11,210	11,231	11,279	11,268	11,272	59	74	121	142	190	179	183	0.5%	0.7%	1.1%	1.3%	1.7%	1.6%	1.7%	
Joralemon Street (4, 5)	26,356	26,821	26,776	26,850	26,914	27,043	27,065	26,829	465	420	493	558	686	709	473	1.8%	1.6%	1.9%	2.1%	2.6%	2.7%	1.8%	
PATH																							
Inbound	134,735	136,302	136,291	136,790	137,253	137,339	137,264	136,396	1,567	1,556	2,055	2,518	2,604	2,529	1,661	1.2%	1.2%	1.5%	1.5%	1.9%	1.9%	1.2%	
Christopher Street	43,258	44,123	43,992	44,361	44,498	44,538	44,611	44,112	865	733	1,103	1,240	1,280	1,352	853	2.0%	1.7%	2.5%	2.9%	3.0%	3.1%	2.0%	
World Trade Center	91,477	92,179	92,300	92,429	92,755	92,801	92,653	92,284	702	823	952	1,278	1,324	1,176	807	0.8%	0.9%	1.0%	1.4%	1.4%	1.3%	0.9%	

Table 4A.2-15. Change in Mode Share to the Manhattan CBD (2045)

Daily Journeys									Percent Change						
Scenario									Scenario						
Scenario	No Action	A	B	C	D	E	F	G	A	B	C	D	E	F	G
Total Person Journeys to CBD	2,060,217	2,059,673	2,063,862	2,061,591	2,056,916	2,058,663	2,061,603	2,058,403	0%	0%	0%	0%	0%	0%	0%
Drive Alone	195,550	179,719	179,065	172,758	166,999	160,143	161,776	177,186	-8%	-8%	-12%	-15%	-18%	-17%	-9%
HOV / Shared Ride	137,365	137,579	137,323	137,086	135,196	133,715	134,701	137,052	0%	0%	0%	-2%	-3%	-2%	0%
Taxi / FHV	32,052	24,713	31,887	27,656	19,757	25,329	30,582	23,340	-23%	-1%	-14%	-38%	-21%	-5%	-27%
Commuter Rail	434,018	441,246	440,810	442,498	446,877	447,609	445,970	443,261	2%	2%	2%	3%	3%	3%	2%
Other Transit (e.g., subway / bus)	1,204,475	1,220,058	1,218,095	1,224,960	1,231,326	1,235,246	1,232,204	1,220,754	1%	1%	2%	2%	3%	2%	1%
Walk and Bike	53,205	52,634	52,918	52,894	52,808	52,810	52,531	53,039	-1%	-1%	-1%	-1%	-1%	-1%	0%
School Bus	3,552	3,724	3,764	3,739	3,953	3,811	3,839	3,771	5%	6%	5%	11%	7%	8%	6%
Total Person Journeys from CBD	176,050	175,227	176,212	174,978	173,235	173,467	174,685	174,340	0%	0%	-1%	-2%	-1%	-1%	-1%
Drive Alone	14,103	13,096	13,145	12,919	12,217	12,147	12,140	12,895	-7%	-7%	-8%	-13%	-14%	-14%	-9%
HOV / Shared Ride	32,631	32,135	32,170	31,637	31,603	30,924	31,264	32,100	-2%	-1%	-3%	-3%	-5%	-4%	-2%
Taxi / FHV	4,689	3,548	4,454	3,832	2,507	3,302	4,270	3,183	-24%	-5%	-18%	-47%	-30%	-9%	-32%
Commuter Rail	3,310	3,408	3,518	3,291	3,413	3,314	3,373	3,409	3%	6%	-1%	3%	0%	2%	3%
Other Transit (e.g., subway / bus)	86,971	88,026	87,936	88,192	88,496	88,473	88,434	88,144	1%	1%	1%	2%	2%	2%	1%
Walk and Bike	31,641	32,207	32,264	32,351	32,188	32,561	32,462	32,038	2%	2%	2%	2%	3%	3%	1%
School Bus	2,705	2,807	2,725	2,756	2,811	2,746	2,742	2,571	4%	1%	2%	4%	2%	1%	-5%
Total Person Journeys within CBD	920,923	921,442	919,896	923,570	924,139	924,368	922,735	922,384	0%	0%	0%	0%	0%	0%	0%
Drive Alone	7,792	7,631	7,861	7,439	7,601	7,765	7,594	7,630	-2%	1%	-5%	-2%	0%	-3%	-2%
HOV / Shared Ride	26,492	27,528	27,479	27,066	27,334	27,005	26,795	26,854	4%	4%	2%	3%	2%	1%	1%
Taxi / FHV	29,189	29,450	29,354	29,935	29,513	29,346	29,389	29,533	1%	1%	3%	1%	1%	1%	1%
Commuter Rail									-	-	-	-	-	-	-
Other Transit (e.g., subway / bus)	250,811	251,057	250,070	251,735	252,596	252,968	252,425	252,483	0%	0%	0%	1%	1%	1%	1%
Walk and Bike	602,457	601,649	600,870	603,242	602,958	603,087	602,497	601,645	0%	0%	0%	0%	0%	0%	0%
School Bus	4,182	4,127	4,262	4,153	4,137	4,197	4,035	4,239	-1%	2%	-1%	-1%	0%	-4%	1%